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COMPUTERIZED INFORMATION MANAGEMENT FOR WORK EXECUTION
DOCUMENTS AND SALE (U) CHEMICAL RESEARCH AND
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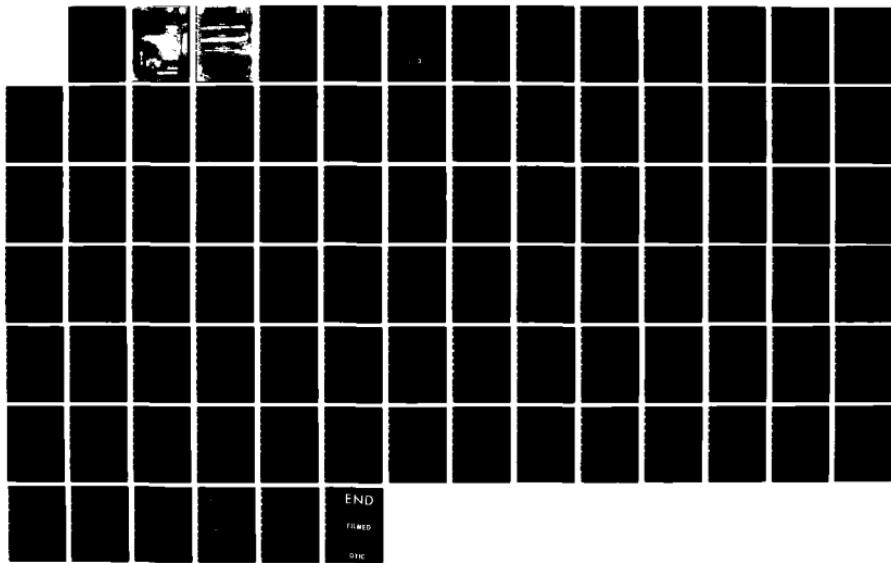
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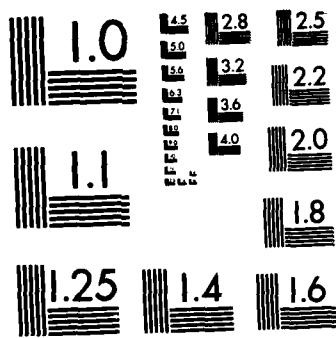
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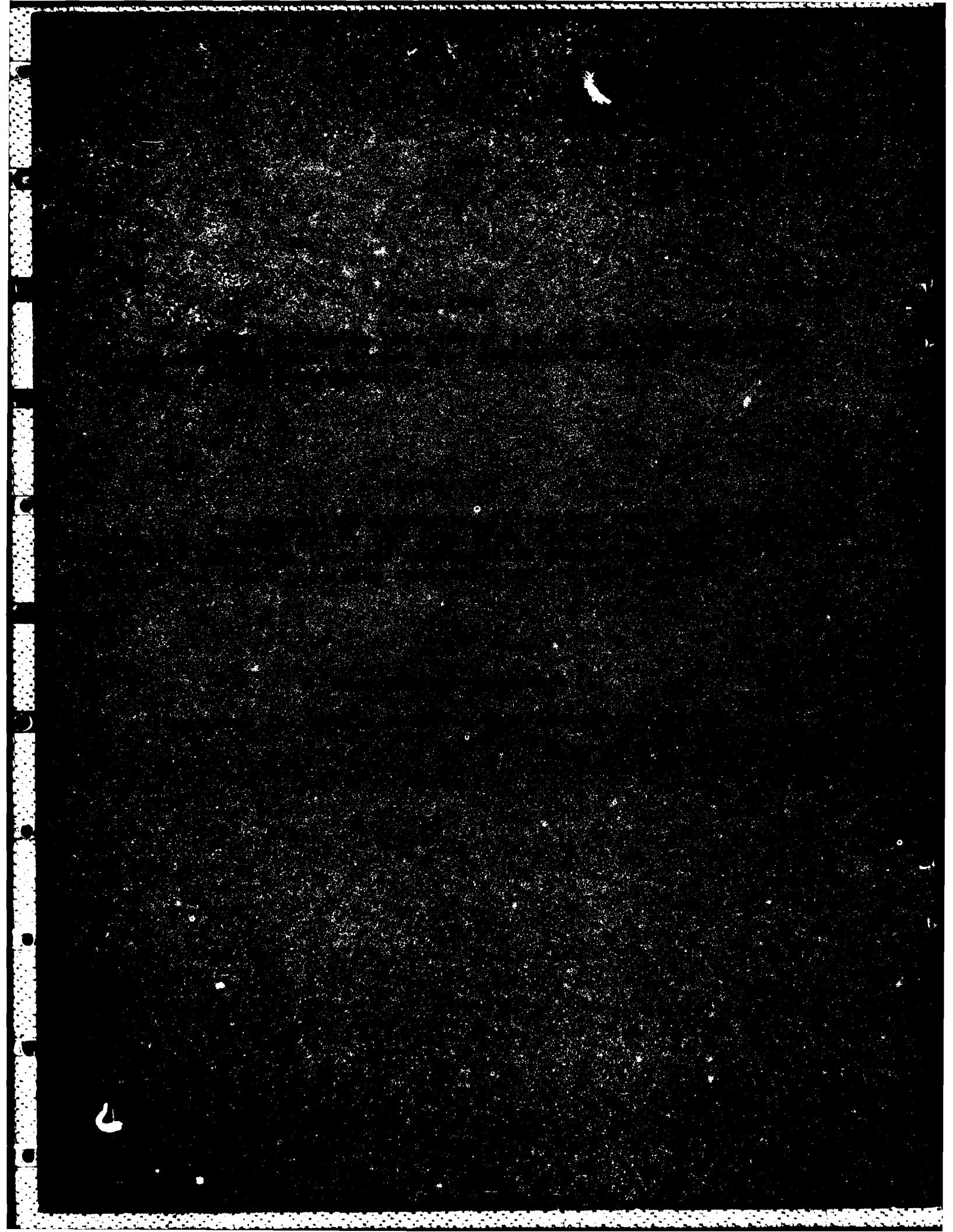
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PREFACE

The work described in this report was authorized by The Director, Munitions Directorate, Chemical Research and Development Center. This work was started in May 1984 and completed in September 1984.

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This report has been approved for release to the public.

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COMPUTERIZED INFORMATION MANAGEMENT FOR WORK EXECUTION DOCUMENTS AND SALES ORDER MASTER PLANS

1. INTRODUCTION

In October 1983, a study of the US Army Chemical Research and Development Center's financial management system was prepared in an attempt to define procedures which could streamline financial management. It was concluded that the format and amount of data provided to the users was inefficient ... "Outdated data, manual record keeping, reviewing of thick reports, and numerous recalculations are some of the problems encountered on a day-by-day basis. The system does not employ the 'management by exception' concept and does not use the latest available automatic data processing technology to capture and forward inputs or make data available to the users."

With the resurgence of interest in computerized management generated by the financial management study, the authors have developed computerized, menu-driven programs for resource planning designed to optimize the effectiveness of available funds. These programs are written in the BASIC programming language for an IBM Personal Computer (PC) and a Tektronix 4050 series computer. They will be referred to as CIM (Computerized Information Management). They have been gainfully employed by the Binary Group, Munitions Development Division, since their introduction to process Work Execution Documents (WEDs) and Sales Order Master Plans (SOMPs).

CIM is intended to be stand alone and user friendly. The instructions are written for an operator with only limited experience on the IBM PC or Tektronix computers. The programs incorporate the use of a project planning document at the sales order level and a work execution document at the performer level. To successfully implement the programs, project managers or sales order holders will still be required to closely coordinate the development of their annual plans with the performing elements. However, CIM provides managers with a relatively simple method to modify plans and also provides planning data useful in scheduling personnel as well as projecting execution of funds.

2. WORK EXECUTION DOCUMENTS

Work orders are instruments prepared under a sales order to establish units of accomplishment, responsibility for planning and performance, and reporting of costs. They are issued by the organizational segments responsible for the sales order. Work orders are not issued until a sales order is formally entered into the Dover Site Financial Management System, and the total planned amount of all work may not exceed the total amount

authorized by the sales order. Upon receipt, the organizational segment assigned a work order is likewise responsible for issuing corresponding job orders, Forms 231, Work Execution Documents (WEDs), and ensuring that the total planned expenditures for these do not exceed the total amount of the work order. Job orders are issued to the performing segments, as needed, to establish the control, cost accumulation, and reporting segregations desired. A job order change is issued when a change is made in the task or funds assigned, and the issuance of a new job order would be inappropriate.

The function of the WED is to define the scope of work, establish the start and completion dates, time phase the hours and dollars to be expended, identify segments eligible to charge the work, and provide the baseline for variance analysis. The first function is perhaps the most important. The project engineer must coordinate with the performers to determine the scope of work. This must be clearly defined so that performers fully comprehend what work must be completed, at what cost, and by when. At this point, all WEDs are summed and a planning document is prepared.

3. SALES ORDER MASTER PLANS

Within CRDC, overall project funds are provided to the group responsible for the project, which in turn coordinates with potential support organizations and then develops a plan for distribution of funds. Form 232, the Sales Order Master Plan (SOMP), details by quarters the manhours to be provided to each internal organization and the money to be provided to the external elements, such as contractors and other government agencies (OGA). The manhours are converted to funds using specific rates applicable to each appropriation, and funds and manhours are totaled in two directions. The overall total funds represent the expenditure planned to be incurred throughout the fiscal year for the project. The above planning work is performed by the project engineer until a well-balanced program is achieved. On a large project, the calculations alone are extremely time consuming, and mistakes are common. The problem is aggravated by the fact that changing circumstances or changes in management direction can create requirements for frequent changes in completed SOMP.

After the project engineer completes the SOMP, it is sent to his respective budget analyst. The analyst will spot check the SOMP, make corrections, and calculate the stabilized billing rate (SBR). The SBR is calculated by adding the total labor dollars plus materials, equipment, and travel. This dollar figure is then divided by the total labor hours to obtain the SBR. The analyst also ensures there is no over-issuance of dollars by comparing the SOMP to the program authority issued by Finance and Accounting at the Dover Site. The SOMP is then sent to the Program Management Resource Division for

review and key entering into the UNIVAC 1100/61, where the SOMP data base is maintained by The Management Information Systems and Studies Directorate. A printout of the SOMP, or mirror image, is returned to the appropriate sales order holder.

Project engineers or work leaders may obtain assistance in preparing the Forms 231 and 232 from their directorate's budget analyst. These forms, along with instructions for completion, are included in Appendices C and D.

4. THE CIM PROGRAM FOR WORK EXECUTION DOCUMENTS AND SALES ORDER MASTER PLANS

4.1 Overview.

The first priority of the authors was to computerize those processes described above for Work Execution Documents and Sales Order Master Plans. This task has been achieved by CIM and is presented here. More importantly, the CIM Programs achieve the substantial goal of automatically generating the SOMP as a result of changes made to the WEDs. That is to say, CIM creates a relationship between the WEDs and the SOMP.

CIM's Work Execution Document Program is used to generate and revise WEDs and SOMPs totally by computer. Specifically, the project engineer responds to questions prompted by the monitor that are typical of both forms. For example, he would type in the header information, description of work to be performed, planned in-house expenditures, and external obligations. All of this work is done on the screen. The computer then makes all calculations, double-checks for inconsistent dollar amounts (including round-off), and prints out an identical copy of the completed WED. It also stores the data in a data base for future revisions or changes intended to achieve a balanced program. When satisfied, the operator then generates a copy of the completed SOMP by merely pressing a key, thus completing an error-free SOMP in a fraction of the time currently required. The information can then be passed on to the budget analyst.

4.2 Instructions for Use With the IBM Personal Computer.

The CIM Program is straightforward and simple to use. The user could actually get by with only limited experience using either the WED or the SOMP forms. Unlike programs written for SOMP applications using electronic spreadsheets such as 'VISICALC' or 'SUPERCOMP,' it does not require special modifications and templates for multiple pages or the type of funds involved; these were included in the programming effort. Also, the WED and SOMP routines require only 41.8K bytes of memory, compared to upwards of 256K for the spreadsheet SOMP and its respective 'VISICALC' templates.

GETTING STARTED:

The procedures for using CIM on your IBM Personal Computer are described below. You should have a formatted blank disk available before continuing. This will be used as your data disk.

Starting CIM is very simple: If your computer is off, place the program disk in Drive A, then turn on electrical power. If your computer is on, place the program disk in Drive A. Make sure that the DOS prompt identifies Drive A, and simultaneously press the Ctrl, Alt, and Del keys.

Once the Work Execution Document Program is initially loaded into memory, a brief credit to the program developers will be shown. The program menu will automatically be displayed (Figure 1).

WORK EXECUTION DOCUMENT		FUNCTION KEY DEFINITIONS	
FUNCTION KEYS		SHIFT FUNCTION KEYS	
F1	- INITIAL OUTPUT	F1	- INITIAL INPUT
F2	- DISPLAY BLANK CHART	F2	- PRINT WEDS
F3	- DISPLAY DATA	F3	- SAVE DATA
F4	- CALCULATE RESULTS	F4	- REVISIONS
F5	- FORMAT DATA DISK	F5	- OUTPUT ONE SO#
F6	- HELP	F6	- ERASE DATA FILE
F7	- ^	F7	- SUM ALL W/O
F8	- PRINT SOMP	F8	- SUM ALL J/O
F9	- (DO NOT USE)	F9	- SUM W/O CC
F10	- RETURN TO DOS	F10	- SUM J/O CC

PRESS ANY FUNCTION KEY WHEN READY TO RETURN TO PROGRAM

Figure 1. Menu for Work Execution Document Program

Most subroutines for completing the WED and SOMP forms are controlled by the computer's 10 function keys. These work independently, allowing the project manager to perform as quickly as possible only those tasks that concern him. They are self-explanatory, but the overall procedure is as follows:

- Insert a formatted blank disk into Drive B. Press F5 (FORMAT DATA DISK). This key is used to prepare an area within the data disk for new data. It is generally used only when a new disk is initiated, or when 'INITIAL OUTPUT' draws a blank search. Do not remove either disk from this point.

```

1941 PRINT "EXECUTION DOCUMENT DATA FOR A PARTICULAR COST CENTER."
1951 PRINT "INPUT THE FOLLOWING AS SPECIFIED. IF YOU ARE REVISING "
1961 PRINT "A PREVIOUS FILE AND YOU WISH NOT TO CHANGE THE DATA "
1971 PRINT "STATEMENT, ENTER ";:COLOR 0,7:PRINT "F7";:COLOR 10,0:PRINT ", PRESS
RETURN AND THAT LINE WILL STAY "
1981 PRINT "AS IT WAS ON FILE. IF YOU WISH TO CHANGE THE LINE THEN "
1991 PRINT "ENTER THE NEW LINE AND PRESS RETURN. ENTERING ";:COLOR 0,7:PRINT "F7
";:COLOR 10,0:PRINT " TWICE"
1992 PRINT "WILL BYPASS FURTHER HEADER INFORMATION AND IMMEDIATELY"
1993 PRINT "FORWARD YOU TO THE SPREADSHEET.":PRINT
2001 COLOR 26,0:PRINT TAB(17) "           PRESS RETURN TO CONTINUE ";:BEEP:BEEP:
COLOR 10,0
2011 INPUT Z$
2021 IF Z7=0 THEN 2251
2031 CLS
2041 PRINT "TO CC: ";B$," DATE: ";D$,"RESP PERSON: ";C$
2051 PRINT Y$
2061 PRINT "FROM CC: ";E$," DATE: ";G$,"INITIATOR: ";F$
2071 PRINT "APPROVED: ";H$," DATE: ";I$
2081 PRINT "(1)WORK ORDER/(2)JOB ORDER ";D5
2091 PRINT "PLAN START DATE ";L$,"PLAN END DATE ";M$
2101 PRINT "REV NO ";N$
2111 PRINT "ORDER NO ";O$
2121 PRINT "SO EXP DATE ";P$,"    SOC CC ";R$
2131 PRINT "TITLE: ";S$
2141 PRINT "           ";U$
2151 PRINT "INT MGT CODE ";T$," TYPE ORDER(1)SBR/(2)FP/(3)EXEMPT ";DO
2161 PRINT "FUNDS"
2171 PRINT "PRIOR ";D1,"INCREASE ";D2
2181 PRINT "DECREASE ";D3,"CURRENT ";D4
2191 PRINT "DESCRIPTION OF WORK TO BE PERFORMED:"
2201 PRINT W$
2211 PRINT V$
2221 PRINT X$
2231 COLOR 26,0:PRINT TAB(17) "           PRESS RETURN TO CONTINUE ";:BEEP:BEEP:
2241 INPUT Z$:COLOR 10,0
2251 CLS
2261 PRINT "TO CC: ";
2271 INPUT Z$:Z$=Z$+"  ":Z$=LEFT$(Z$,3)
2301 IF Z$="^^" THEN 4821
2302 IF Z$<>"^" THEN 2331
2311 PRINT "           ";B$
2321 GOTO 2341
2331 B$=Z$
2341 PRINT "           DATE: ";
2351 INPUT Z$
2361 IF Z$<>"" THEN 2381
2371 Z$=" "
2381 IF Z$="^^" THEN 4821

```

```

1794 LOCATE J,2:PRINT Z$;
1795 NEXT J
1796 READ Z$
1797 LOCATE 5,63:PRINT Z$
1798 FOR J=15 TO 80 STEP 8
1799 READ Z$
1800 LOCATE 8,J:PRINT Z$
1801 NEXT J
1802 LOCATE 7,57:PRINT "BFY"
1803 LOCATE 7,57:PRINT "BFY":DATA "GRAND TOTAL","SUB TOTAL","TOTAL EQUIP","TOTAL
OGA","TOTAL CONT"
1804 DATA "TOTAL MAT"
1805 DATA "                                PLANNED OUT OF HOUSE OBLIGATIONS"
1806 DATA "SUB TOTAL","MISC","TRAVEL","TOTAL LAB $","MIL D/L HRS"
1807 DATA "CIV D/L HRS","ELEMENTS"
1808 DATA "                                PLANNED IN HOUSE EXPENDITURES"
1809 DATA "1ST QTR","2ND QTR","3RD QTR","4TH QTR"," TOTAL"
1810 DATA "1ST QTR"," C/F"," TOTAL"," "
1818 COLOR 26,0:LOCATE 1,27:PRINT "PRESS ANY KEY TO CONTINUE":COLOR 10,0
1819 K$=INKEY$:IF LEN(K$)=0 THEN 1819
1820 GOSUB 14000:GOSUB 10600:RETURN 10650
1821 CLS
1822 COLOR 0,7
1825 PRINT TAB(10) "
"
1831 PRINT TAB(10) "      ***** REVISIONS *****"
"
1832 PRINT TAB(10) "
"
1833 COLOR 10,0
1835 PRINT TAB(10) "
"
1836 PRINT
1841 Z7=1
1851 GOTO 1911
1861 CLS
1871 Z7=0
1891 CLEAR ,,10000:GOSUB 31000
1902 COLOR 0,7
1903 PRINT TAB(10) "
"
1911 PRINT TAB(10) "      ***** WORK EXECUTION DOCUMENT PROGRAM *****"
"
1921 PRINT TAB(10) "      ***** DATA STORAGE *****"
"
1922 PRINT TAB(10) "
"
1923 COLOR 10,0
1924 PRINT
1931 PRINT "THIS PROGRAM IS DESIGNED TO STORE THE WORK"

```

```

1350 NEXT
1355 IF FLG=1 THEN 1300
1356 PRINT "
1360 REM
1380 REM
1390 OPEN"A:SEX.FIL" FOR OUTPUT AS #1:CLOSE #1
1400 OPEN"B:WORK3.FIL" FOR INPUT AS #1
1402 INPUT #1,X0:CLOSE #1
1403 FOR XX=3 TO X0:E1=LEN(STR$(XX))
1404 FILENAME$="B:WORK"+RIGHT$(STR$(XX),E1-1)+".)+"FIL"
1405 OPEN FILENAME$ FOR OUTPUT AS #1 :CLOSE #1:NEXT XX
1406 FLG=1
1407 GOTO 1355
1421 CLS:COLOR 12,0:PRINT "CALCULATING..."
1455 RESTORE 1651
1461 FOR J=1 TO 18
1471 X3=0
1481 READ F,V1,V2
1491 FOR K=V1 TO V2
1501 X3=M(F,K)+X3
1511 NEXT K
1521 M(F,V2+1)=X3
1531 NEXT J
1541 FOR J=1 TO 8
1551 M(3,J)=INT(M(1,J)*D6+.5)+INT(M(2,J)*D7+.5)
1561 NEXT J
1571 FOR J=1 TO 16
1581 X3=0
1591 READ F,V1,V2
1601 FOR K=V1 TO V2
1611 X3=X3+M(K,F)
1621 NEXT K
1631 M(V2+1,F)=X3
1641 NEXT J
1651 DATA 1,1,4,2,1,4,3,1,4,4,1,4,5,1,4,8,1,4,9,1,4,10,1,4,11,1,4
1661 DATA 1,5,7,2,5,7,3,5,7,4,5,7,5,5,7,8,5,7,9,5,7,10,5,7,11,5,7
1671 DATA 1,3,5,2,3,5,3,3,5,4,3,5,5,3,5,6,3,5,7,3,5,8,3,5
1681 DATA 1,8,11,2,8,11,3,8,11,4,8,11,5,8,11,6,8,11,7,8,11,8,8,11
1691 FOR J=1 TO 8
1701 M(13,J)=M(6,J)+M(12,J)
1711 NEXT J
1721 GOSUB 10600:GOSUB 10650
1731 FOR K=9 TO 21
1741 FOR J=15 TO 71 STEP 8
1751 IF J=7 THEN 1781
1761 LOCATE K,J
1771 IF K<>15 THEN PRINT USING "#####"; M(K-8,INT(J/8))
1781 NEXT J
1791 NEXT K :RESTORE 1803:IF K%>87 THEN 11000
1792 FOR J=21 TO 8 STEP -1
1793 READ Z$

```

```

701 INPUT #1, I$,J$,K$,L$,M$
711 INPUT #1, P$,R$,S$,T$,U$,V$
721 INPUT #1, W$,X$,D0,D1,D2,D3
731 INPUT #1, D4,D6,D7
732 CLS:GOTO 1731
741 FOR XX=1 TO 13:FOR YY=1 TO 8:M(XX,YY)=0:NUMS(XX,YY)=0:NEXT YY:NEXT XX
751 CLS:G2=0 :RESTORE 871
752 COLOR 10,0:LOCATE 1,11:PRINT "ENTER AN ";:COLOR 0,7:PRINT "<ARROW>";:COLOR 1
0,0:PRINT " KEY FROM THE NUMERIC KEYPAD TO MOVE CURSOR."
753 LOCATE 2,11:PRINT "TO EXIT INPUT MODE FOR THE WED PRESS ";:COLOR 0,7:PRINT "
<END>";:COLOR 10,0:PRINT ". USE ";:COLOR 0,7:PRINT "<HOME>";:COLOR 10,0:PRINT "
TO CLEAR DATA."
761 FOR J=21 TO 8 STEP -1
771 READ Z$
781 LOCATE J,2:PRINT Z$;
791 NEXT J
801 READ Z$
811 LOCATE 5,63:PRINT Z$
821 FOR J=15 TO 80 STEP 8
831 READ Z$
841 LOCATE 8,J:PRINT Z$;
851 NEXT J
861 LOCATE 7,57:PRINT "BFY"
871 DATA "GRAND TOTAL","SUB TOTAL","TOTAL EQUIP","TOTAL OGA","TOTAL CONT"
881 DATA "TOTAL MAT"
891 DATA " PLANNED OUT OF HOUSE OBLIGATIONS"
901 DATA "SUB TOTAL","MISC","TRAVEL","TOTAL LAB $","MIL D/L HRS"
911 DATA "CIV D/L HRS","ELEMENTS"
921 DATA " PLANNED IN HOUSE EXPENDITURES"
931 DATA "1ST QTR","2ND QTR","3RD QTR","4TH QTR"," TOTAL"
941 DATA "1ST QTR"," C/F"," TOTAL"," "
951 IF G2=1 THEN 9231
961 LOCATE 6,2:PRINT "COST CENTER:";B$
971 LOCATE 22,2:PRINT O$,Y$,"REV NO ";N$
1022 IF K%>87 THEN RESTORE:COLOR 7,0:GOTO 1731
1023 GOSUB 11000:RESTORE
1031 RETURN
1201 LOCATE 12,30: COLOR 6,0:PRINT "SYSTEM FUNCTION OVERRIDE...":COLOR 10,0:FOR
BACKDOOR=1 TO 1000:NEXT
1255 COLOR 0,0,0:CLS
1260 LOCATE 12,35:COLOR 26,0:PRINT "END":COLOR 10,0
1270 DEF SEG=0
1271 REM
1280 POKE &H417,40 'KEY LOCK
1290 DEF SEG
1300 FOR T=440 TO 1000 STEP 5
1310 SOUND T,.5
1320 NEXT
1330 FOR T=1000 TO 440 STEP -5
1340 SOUND T,.5

```

```

313 PRINT TAB(10) "
321 PRINT TAB(10) " ***** WORK EXECUTION DOCUMENT PROGRAM *****
331 PRINT TAB(10) " ****
341 PRINT TAB(10) " ***** OUTPUT *****
342 PRINT TAB(10) "
343 COLOR 10,0
344 PRINT
351 PRINT "THIS PROGRAM IS DESIGNED TO PRINT OUT THE "
361 PRINT "WORK EXECUTION DOCUMENT FOR A PARTICULAR COST CENTER."
371 PRINT "ENTER SALES ORDER NUMBER (4DIGITS):";
381 INPUT Q$
391 CLS
401 PRINT "SO# ";Q$
411 PRINT ""; "SO#", "CC:"; ""
421 OPEN "B:WORK3.FIL" FOR INPUT AS #1
431 INPUT #1,X0
441 CLOSE #1
461 C1=0
471 FOR J=4 TO X0
475 E1=LEN(STR$(J))
481 FILENAME$="B:WORK"+RIGHT$(STR$(J),E1-1)+".FIL"
491 OPEN FILENAME$ FOR INPUT AS #1
501 INPUT #1,O$,B$,Y$
511 CLOSE #1
521 Z$=LEFT$(O$,4)
531 IF Q$="LIST" THEN 551
541 IF Q$<>Z$ THEN 581
551 C1=C1+1
561 PRINT "(";C1;") ";O$;" ",B$,Y$
571 F1(C1)=J
581 NEXT J
591 IF C1>0 THEN 621
601 PRINT "NO DATA WAS FOUND UNDER THAT SALES ORDER"
611 GOTO 371
621 PRINT "ENTER A # FROM THE LIST (1,2,3,... OR 0 FOR RETURN TO MENU) ";
631 INPUT C1
632 IF C1=0 THEN 257
641 NO=F1(C1)
642 E1=LEN(STR$(NO))
643 IF NO=0 THEN BEEP:GOTO 621
651 FILENAME$="B:WORK"+RIGHT$(STR$(NO),E1-1)+".FIL"
652 IF K%>89 THEN 9271
661 OPEN FILENAME$ FOR INPUT AS #1
681 INPUT #1, O$,B$,Y$,D5,N$
682 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
691 INPUT #1, C$,D$,E$,F$,G$,H$

```

```
1 REM WORK EXECUTION DOCUMENT PROGRAM ** AUGUST 1984 ** IBMPC VER 2.0
2 REM EDWARD F DOYLE III AND R ANDREW BLANKENBILLER ** (301) 671-2494
3 KEY OFF:COLOR 12,0:FOR L=1 TO 10:KEY L,"":KEY(L) OFF:NEXT L:GOSUB 20000
4 KEY 7,""
12 CLEAR ,,10000:GOSUB 31000:GOTO 257
21 K$=INKEY$:IF LEN(K$)=0 THEN 21
    ELSE K$=ASC(K$)
31 IF K$>31 OR (K$<28 AND K$>14) OR (K$<8 AND K$>0) THEN BEEP
41 IF LEN(K$)<2 THEN 21 ELSE K$=ASC(RIGHT$(K$,1))
51 IF K$=84 THEN GOTO 161
61 IF K$=85 THEN GOTO 171
71 IF K$=86 THEN GOTO 181
81 IF K$=87 THEN GOTO 191
91 IF K$=88 THEN GOTO 201
101 IF K$=89 THEN GOTO 211
111 IF K$=90 THEN GOTO 221
121 IF K$=91 THEN GOTO 231
131 IF K$=92 THEN GOTO 241
141 IF K$=93 THEN GOTO 251
142 IF K$=59 THEN GOTO 252
143 IF K$=60 THEN GOTO 253
144 IF K$=61 THEN GOTO 254
145 IF K$=62 THEN GOTO 255
146 IF K$=63 THEN GOTO 256
147 IF K$=64 THEN GOTO 32000
148 IF K$=65 THEN GOTO 258
149 IF K$=66 THEN GOTO 259
150 IF K$=67 THEN GOTO 260
151 IF K$=68 THEN SYSTEM
161 GOSUB 1861:GOTO 21
171 GOSUB 10001:GOTO 21
181 GOSUB 4831:GOTO 21
191 GOSUB 1821:GOTO 21
201 GOSUB 8841:GOTO 21
211 GOSUB 9071:GOTO 21
221 GOSUB 7431:GOTO 21
231 GOSUB 7751:GOTO 21
241 GOSUB 8071:GOTO 21
251 GOSUB 8391:GOTO 21
252 GOSUB 262:GOTO 21
253 GOSUB 741:GOTO 21
254 GOSUB 1731:GOTO 21
255 GOSUB 1421:GOTO 21
256 GOSUB 25000
257 GOSUB 10600:GOSUB 10650:GOTO 21
258 GOTO 51
259 GOSUB 16000:GOTO 21 'SOMP PGM
260 GOSUB 1201:GOTO 21
261 GOSUB 1271:GOTO 21
262 CLS
312 COLOR 0,7
```

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APPENDIX A

**COMPUTERIZED INFORMATION MANAGEMENT PROGRAM LISTINGS FOR THE IBM
PERSONAL COMPUTER**

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4.3 Use With the Tektronix 4050 Series Computer

CIM was originally designed and written to run on a Tektronix 4051 computer. Due to the limited number of these computers in Munitions Directorate, step-by-step instructions are not provided here; however, the program and instructions for use may be obtained by contacting the authors.

This version's primary difference is that the WEDs are created for the system's pen plotter on a blank sheet of paper. The SOMPs utilize the actual Form 232; output is sent to the plotter and directed to individual blocks or lines on the preprinted form.

5. CONCLUSIONS

CIM is a valuable tool for computerized financial management and accounting. It provides a concise and simple method to produce and revise accurate work orders and job orders, and to generate from these a completed sales order form. No calculations or paperwork are needed by the project engineer, and finalized information may be passed on for job execution or further processing in a fraction of the current required time. Application of these programs as the first link in a new computerized financial management system is a viable option, providing a user-friendly and watchful guide for CRDC principals.

Perhaps the next step for enhancing CIM is to investigate the feasibility of updating the CRDC SOMP Data Base (which resides on the UNIVAC 1100/61 computer) directly from the IBM PCs. The data base might also include a manpower planning routine at the cost center level. Because there are several alternative ways to load data into a data base, the method chosen depends on the amount of data to be loaded, the resources available, and whether the data is batched up periodically or added in an ad hoc fashion when available.

● F8 - (PRINT SOMP). Pressing this key enables the project manager to create a copy of the Sales Order Master Plan for all of the work and job orders under any given project (Sales Order). This function key loads the SOMP subroutine, gathers and sorts all related data, performs the SOMP calculations and totals both funds and hours, calculates the SBR, and prints an error-free copy of the completed SOMP. No effort is required at all on the operator's behalf to produce this form, a major advantage in time and quality over either manual or partial computer methods. Time need not be spent transferring the results by hand to each SOMP form. Those who are not familiar with the form should refer to the instructions in Appendix D for completing the SOMP.

All dollar amounts (both internal and external efforts) are expressed in thousands. For example, .5 actually means \$500, 5.0 represents \$5,000, and 5.5 represents \$5,500.

After evoking this subroutine, you will notice that the computer prompts the operator for a sales order number followed by prompts for typical header information. Ensure that your printer is ready when the monitor prompts 'PRESS RETURN WHEN READY?.' After printing the SOMP form, the subroutine goes back to the main menu.

● Shift function keys F7, F8, F9, F10 -- These four keys are added purely to provide the project manager a means of quickly checking his finances to assure accuracy and prevent over-issuance of dollars. They sum the total dollars planned for a given project by <F7>, all work orders initiated; <↑F8> all job orders initiated; <↑F9>, work orders for a particular cost center; and <↑F10>, job orders for a specific cost center.

● ↑ F5 - (OUTPUT ONE SO#) - This output subroutine permits the project manager to directly access a particular work order or job order from the data base. After the order number is entered, Sections C and D of that particular WED will be displayed. Pressing any key will return the operator to the main menu. Since the file has been loaded into the computer's main memory, the operator could evoke the revision subroutine by simply pressing <↑F4> or elect to have the WED printed by pressing <↑F2>.

● ↑ F6 - (ERASE DATA FILE) - This key enables the project manager to purge the data base. The file deletion routine begins by prompting the operator for a sales order number. All work orders and job orders are then displayed. Simply type the number corresponding to the order you want deleted from the data disk. Ensure that you type the correct number, as this routine does NOT have a safety prompt.

● F10 (RETURN TO DOS) - Pressing this function key will simply return CIM to the computer's disk operating system. To restart CIM, press the Ctrl, Alt, Del keys or type BASICA WEDSOMP.EXC after the DOS prompt.

<F4> 'REVISIONS.' This routine can be used for revising an existing file (WED) or creating a new WED using the information from the file in memory. As prompted, press <RETURN> to continue. The screen will display the information contained in Sections A and B of the WED. It might be a good idea to make a printout of this information. This can be done by pressing the <PrtSc> keys. As prompted, press <RETURN> to continue.

Each piece of information, or data line, will be shown in sequence on the display. It is automatically replaced by typing the new information followed by a <RETURN>. If you do not want to change the data line, press <F7> followed by a <RETURN>. This action will display the current data line on the screen. If you want to go directly to Planned Internal Expenditures (Part C) or Planned External Obligations (Part D), press <F7> <F7> followed by a <RETURN>. This can be done after the first data line prompt (TO CC:?) or after any of the other data lines in Parts A or B of the WED.

In-House Expenditures and Out-of-House Obligations can be changed by typing the dollar figure in the appropriate cell. You will notice that after entering the right arrow key to initialize input, the blinking cursor will appear. Any revisions you type will be displayed to the left of the original dollar figure. It should be noted that an overlap may occur. For example, suppose your screen shows 1000 in the 2ND QTR - TOTAL MAT input window. You would like to change this figure to 5000. Typing 5000 in this window will result in a figure of 5000000. The last zero in 5000 replaced the 1 in 1000, and retained the three trailing zeros. This is probably not what you wanted. Don't worry, the computer will handle this "problem." The program will correctly operate on the figure you typed (in this case 5000) and display it when you 'CALCULATE RESULTS' and 'DISPLAY DATA.'

To exit 'REVISIONS' press <END> after a <RETURN>. After calculating <F4> and displaying the data <F3>, you should 'SAVE DATA.' As previously mentioned, the prompt will ask 'IS THIS DATA A REVISION (Y or N):?' If the change is a revision, type 'Y.' Printed copies of a revised WED will include a revision number for reference. The routine will automatically increment the revision number every time a revision is made. If you are creating a new WED predicated upon an existing WED (the file in memory), type 'N.' The computer will ask 'DO YOU WANT A NEW FILE CREATED FOR THIS DATA (Y or N):?' Responding with a 'Y' will cause the routine to create a new file on the data disk.

<F4> 'REVISIONS' can also be used to make simple corrections (such as typing mistakes or changing dollar values) to an existing file. The procedure is the same as described above; however, you should respond with an 'N' to both of the computer's prompts. This will cause the correction to be written over the error without creating a new file.

he may then perform all necessary calculations on the WED by pressing this function key. No other operation is required whatsoever. The computer tells you that it is calculating and then returns to the main menu. The WED is now complete. The project manager should again press $\langle F3 \rangle$ 'DISPLAY DATA' if he wants to see the resultant calculations on the WED.

● PRESS $\uparrow F^3$ (SAVE DATA). This key is used to save data to the data disk in Drive B. It stores all of the data on the form into a permanent data base, and also marks a table of contents in the 'INITIAL OUTPUT' routine to allow for future review or retrieval. Before actual storage, the computer will ask if the data is a revision. For a new form, respond with an upper case 'N.' The computer will ask if you want a new file created for this data. For a new form, respond with an upper case 'Y.' Press $\langle RETURN \rangle$ and a file (your new WED) will be written to your data disk on Drive B. The program will return to the main menu.

● PRESS F1 (INITIAL OUTPUT). This key allows the operator to search the data base and displays those cost centers responsible for assigned tasks during the current fiscal year. As prompted, enter the sales order number (4 digits). If you happen to forget your sales order number type 'LIST' followed by $\langle RETURN \rangle$. In the former case, the computer will display a list of all work orders and job orders associated with the sales order number you entered. The latter case will display work orders and job orders for all sales orders on the data disk. Enter a number from the list. The program will load that particular file and display Sections C and D of the WED. Press any key to return to the main menu.

● PRESS $\uparrow F2$ (PRINT WEDS). This key will tell the computer to generate a hard copy of the completed WED. It will print out the work order or job order that was selected in the 'INITIAL OUTPUT' routine $\langle F1 \rangle$. Ensure that your printer is set up before pressing this key. The program was designed so that the WED is printed on one sheet of paper. You should align the top edge of the paper (at perforation) with the print head. After generating the printout, the program will return to the main menu.

● PRESS $\uparrow F4$ (REVISIONS). 'REVISIONS' permits the project manager to make changes or to include updated information that may be available to him on an existing work order or job order. However, in order to revise a particular order, it must be loaded into the computer's memory from the data disk. As previously mentioned, this is done by entering $\langle F1 \rangle$ 'INITIAL OUTPUT' and then selecting a number from the displayed list. Select a number corresponding to the order you want, and the computer will load and then display Sections C and D of the WED for your review. Press any key to return to the main menu. Now press

● PRESS ↑ F1 (INITIAL INPUT). After a brief introduction to the Work Execution Document/Data Storage Program, the program will prompt you to press <RETURN>. The program automatically asks for the typical header information found on any WED to initiate a new form. Respond to the computer's prompts by typing in the header information as specified in the instructions for completing the Work Execution Document found in Appendix C. Press a <RETURN> after each data entry. The characters you type will be displayed in upper case. If you want lower case, depress the <CAPS LOCK> key. If you make a typing error on a current data line, the <BACKSPACE> key can be used to correct it. After inputting the information contained in Sections A and B of the Form 231, the computer will display a blank chart which is identical to Sections C and D of the form. As prompted, press <RETURN> and you will be taken back to the main menu.

Should you somehow get 'lost' in the program and the words "OK" or "CIM Error" appear on the computer's display, simply type 'RUN' followed by a <RETURN>. This will return you to the program's main menu.

● PRESS F2 (DISPLAY BLANK CHART). This key is used to show Sections C and D of the WED on the computer's display and allows for dollar input and/or manipulation. Notice that the last row on the screen identifies your Work Order or Job Order number, cost center title, and revision number. As instructed on the screen, press the right arrow key to initialize the input process. The blinking cursor will appear under the 1st Qtr opposite CIV D/L HRS. Simply type in the dollar amounts in the same places they would normally go on the WED. Notice that the row and column location of your cursor is indicated in the upper left-hand portion of the screen. After typing in hours for CIV D/L HRS, press <RETURN> and then an arrow key (cursor movement key) to move to the next cell. Do not type in the Total column or Total Lab \$ row; the program will take care of these calculations. Move the cursor to any cell location you so desire by using any of the four arrow keys followed by a <RETURN>. You can only move one cell at a time. If you make a typing mistake, simply move the cursor back to the cell with the error and type the new figure over. Do not type subtotals or grand totals; the computer will also take care of these calculations. After you have completed the form, press <RETURN> and then the <END> key.

● Press F3 (DISPLAY DATA). At this point all information, both qualitative and quantitative, has been input to produce the final WED. This function key allows the project manager to review his work by showing the data on the display screen. Pressing any key will return to the main menu.

● PRESS F4 (CALCULATE RESULTS). When the project manager is satisfied with the information that he has provided,

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2382 IF Z$<>"" THEN 2411
2391 PRINT "
2401 GOTO 2421
2411 D$=Z$          ";D$
2421 PRINT "RESP PERSON:";
2431 INPUT Z$          ;C$
2441 IF Z$<>"" THEN 2461
2451 Z$=" "
2461 IF Z$="^^" THEN 4821
2462 IF Z$<>"" THEN 2491
2471 PRINT "
2481 GOTO 2501
2491 C$=Z$
2501 PRINT "ENTER NON-ABBREVIATED NAME OF COST CENTER: ";
2511 INPUT Z$          ;Y$
2512 IF LEN(Z$)>40 THEN 2501
2521 IF Z$<>"" THEN 2541
2531 Z$=" "
2541 IF Z$="^^" THEN 4821
2542 IF Z$<>"" THEN 2571
2551 PRINT "
2561 GOTO 2611
2571 IF LEN(Z$)<=31 THEN 2601
2581 PRINT "HAS TOO MANY LETTERS "
2591 GOTO 2501
2601 Y$=Z$          ;Y$
2611 PRINT "FROM CC:";
2621 INPUT Z$          ;E$
2631 IF Z$<>"" THEN 2651
2641 Z$=" "
2651 IF Z$="^^" THEN 4821
2652 IF Z$<>"" THEN 2681
2661 PRINT "
2671 GOTO 2691
2681 E$=Z$          ;G$
2691 PRINT "           DATE:";
2701 INPUT Z$          ;G$
2711 IF Z$<>"" THEN 2731
2721 Z$=" "
2731 IF Z$="^^" THEN 4821
2732 IF Z$<>"" THEN 2761
2741 PRINT "
2751 GOTO 2771
2761 G$=Z$          ;F$
2771 PRINT "INITIATOR:";
2781 INPUT Z$          ;F$
2791 IF Z$<>"" THEN 2811
2801 Z$=" "
2811 IF Z$="^^" THEN 4821
2812 IF Z$<>"" THEN 2841
2821 PRINT "
2831 GOTO 2851

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2841 F$=Z$
2851 PRINT "APPROVED (THIS SHOULD BE HAND INITIALED... PRESS <RET> ONLY):";
2861 INPUT Z$
2871 IF Z$<>"" THEN 2891
2881 Z$=" "
2891 IF Z$="^^" THEN 4821
2892 IF Z$<>^^ THEN 2921
2901 PRINT " " ;H$
2911 GOTO 2931
2921 H$=Z$
2931 PRINT "DATE:";
2941 INPUT Z$
2951 IF Z$<>"" THEN 2971
2961 Z$=" "
2971 IF Z$="^^" THEN 4821
2972 IF Z$<>^^ THEN 3001
2981 PRINT " " ;I$
2991 GOTO 3011
3001 I$=Z$
3011 PRINT "ENTER 1 OR 2 :(1)WORK ORDER ,(2)JOB ORDER ";
3021 INPUT Z$
3031 IF Z$<>"" THEN 3051
3041 Z$="0"
3051 IF Z$="^^" THEN 4821
3052 IF Z$<>^^ THEN 3081
3061 PRINT " " ;D5
3071 GOTO 3091
3081 D5=VAL(Z$)
3091 PRINT "PLAN START DATE:";
3101 INPUT Z$
3111 IF Z$<>"" THEN 3131
3121 Z$=" "
3131 IF Z$="^^" THEN 4821
3132 IF Z$<>^^ THEN 3161
3141 PRINT " " ;L$
3151 GOTO 3171
3161 L$=Z$
3171 PRINT "PLAN END DATE:";
3181 INPUT Z$
3191 IF Z$<>"" THEN 3211
3201 Z$=" "
3211 IF Z$="^^" THEN 4821
3212 IF Z$<>^^ THEN 3241
3221 PRINT " " ;M$
3231 GOTO 3251
3241 M$=Z$
3251 PRINT "REV NO:";
3261 INPUT Z$
3271 IF Z$<>"" THEN 3291
3281 Z$=" "
3291 IF Z$="^^" THEN 4821

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3292 IF Z$<>"" THEN 3321
3301 PRINT "      ";N$
3311 GOTO 3331
3321 N$=Z$
3331 PRINT "ORDER NO. (ex: WORKORDER=5L87-10 JOBORDER=5L87-10-001):";
3341 INPUT Z$
3351 IF Z$<>"" THEN 3371
3361 Z$=" "
3371 IF Z$="^^" THEN 4821
3372 IF Z$<>"" THEN 3401
3381 PRINT "      ";O$
3391 GOTO 3411
3401 O$=Z$
3411 PRINT "S O EXP DATE:";
3421 INPUT Z$
3431 IF Z$<>"" THEN 3451
3441 Z$=" "
3451 IF Z$="^^" THEN 4821
3452 IF Z$<>"" THEN 3481
3461 PRINT "      ";P$
3471 GOTO 3491
3481 P$=Z$
3491 PRINT "SOH CC:";
3501 INPUT Z$
3511 IF Z$<>"" THEN 3531
3521 Z$=" "
3531 IF Z$="^^" THEN 4821
3532 IF Z$<>"" THEN 3581
3541 PRINT "      ";R$
3542 COLOR 0,7
3551 COLOR 26,0:PRINT TAB(17) "
3561 INPUT Z$:COLOR 10,0
3571 GOTO 3591
3581 R$=Z$
3591 CLS
3601 PRINT "(2 LINES)TITLE:"
3611 PRINT "LINE 1:";
3621 INPUT Z$
3631 IF Z$<>"" THEN 3651
3641 Z$=" "
3651 IF Z$="^^" THEN 4821
3652 IF Z$<>"" THEN 3681
3661 PRINT "      ";S$
3671 GOTO 3691
3681 S$=Z$
3691 IF LEN(S$)<=30 THEN 3721
3701 PRINT "LINE HAS TOO MANY LETTERS (MAX 30)"
3711 GOTO 3601
3721 PRINT "LINE 2:";
3731 INPUT Z$
3741 IF Z$<>"" THEN 3761

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PRESS RETURN TO CONTINUE ";:BEEP:BEEP:

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3751 Z$=" "
3761 IF Z$="^^" THEN 4821
3762 IF Z$<>"^^" THEN 3791
3771 PRINT "           ";U$
3781 GOTO 3801
3791 U$=Z$
3801 IF LEN(U$)<=29 THEN 3831
3811 PRINT "LINE 2 HAS TOO MANY LETTERS (MAX29)"
3821 GOTO 3721
3831 PRINT "INT MGT CODE:";
3841 INPUT Z$
3851 IF Z$<>"" THEN 3871
3861 Z$=" "
3871 IF Z$="^^" THEN 4821
3872 IF Z$<>"^^" THEN 3901
3881 PRINT "           ";T$
3891 GOTO 3911
3901 T$=Z$
3911 PRINT "TYPE ORDER: 1-SBR 2-FP 3-EXEMPT ENTER 1,2, OR 3 :";
3921 INPUT Z$
3931 IF Z$<>"" THEN 3951
3941 Z$="0"
3951 IF Z$="^^" THEN 4821
3952 IF Z$<>"^^" THEN 3991
3961 PRINT "           ";DO
3971 GOTO 4001
3981 PRINT "           ";DO
3991 DO=VAL(Z$)
4001 PRINT "FUNDS"
4011 PRINT "PRIOR:";
4021 INPUT Z$
4031 IF Z$<>"" THEN 4051
4041 Z$="0"
4051 IF Z$="^^" THEN 4821
4052 IF Z$<>"^^" THEN 4081
4061 PRINT "           ";D1
4071 GOTO 4091
4081 D1=VAL(Z$)
4091 PRINT "INCREASE:";
4101 INPUT Z$
4111 IF Z$<>"" THEN 4131
4121 Z$="0"
4131 IF Z$="^^" THEN 4821
4132 IF Z$<>"^^" THEN 4161
4141 PRINT "           ";D2
4151 GOTO 4171
4161 D2=VAL(Z$)
4171 PRINT "DECREASE:";
4181 INPUT Z$
4191 IF Z$<>"" THEN 4211
4201 Z$="0"

```

```
4211 IF Z$="^^" THEN 4821
4212 IF Z$<>"^" THEN 4241
4221 PRINT "           ";D3
4231 GOTO 4251
4241 D3=VAL(Z$)
4251 D4=D1+D2-D3
4261 PRINT "CURRENT: ";D4
4271 PRINT "DESCRIPTION OF WORK TO BE DONE:"
4281 PRINT " 3 LINES MAX-72 CHARACTERS PER LINE"
4291 INPUT Z$
4301 IF Z$<>"" THEN 4321
4311 Z$=" "
4321 IF Z$="^^" THEN 4821
4322 IF Z$<>"^" THEN 4351
4331 PRINT W$
4341 GOTO 4361
4351 W$=Z$
4361 INPUT Z$
4371 IF Z$<>"" THEN 4391
4381 Z$=" "
4391 IF Z$="^^" THEN 4821
4392 IF Z$<>"^" THEN 4421
4401 PRINT V$
4411 GOTO 4431
4421 V$=Z$
4431 INPUT Z$
4441 IF Z$<>"" THEN 4461
4451 Z$=" "
4461 IF Z$="^^" THEN 4821
4462 IF Z$<>"^" THEN 4491
4471 PRINT X$
4481 GOTO 4501
4491 X$=Z$
4501 PRINT "CURRENT FY";
4511 INPUT Z$
4521 IF Z$<>"" THEN 4541
4531 Z$=" "
4541 IF Z$="^^" THEN 4821
4542 IF Z$<>"^" THEN 4571
4551 PRINT "           ";J$
4561 GOTO 4581
4571 J$=Z$
4581 PRINT "BFY";
4591 INPUT Z$
4601 IF Z$<>"" THEN 4621
4611 Z$=" "
4621 IF Z$="^^" THEN 4821
4622 IF Z$<>"^" THEN 4651
4631 PRINT "           ";K$
4641 GOTO 4661
```

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4651 K$=Z$
4661 PRINT "ENTER TOTAL CIV RATE ($/HR)";
4671 INPUT Z$
4681 IF Z$<>"" THEN 4701
4691 Z$="0"
4701 IF Z$="^^" THEN 4821
4702 IF Z$<>"" THEN 4731
4711 PRINT "                                ";D6
4721 GOTO 4741
4731 D6=VAL(Z$)
4741 PRINT "ENTER TOTAL MIL RATE ($/HR)";
4751 INPUT Z$
4761 IF Z$<>"" THEN 4781
4771 Z$="0"
4781 IF Z$="^^" THEN 4821
4782 IF Z$<>"" THEN 4811
4791 PRINT "                                ";D7
4801 GOTO 4821
4811 D7=VAL(Z$)
4821 CLS:IF K%>87 THEN 751 ELSE 741
4831 CLS
4841 PRINT "IS THIS DATA A REVISION (Y OR N):";
4851 INPUT Z$
4861 IF Z$="N" THEN 4902
4871 N$=STR$(VAL(N$)+1)
4881 N$=STR$(0)+RIGHT$(N$,LEN(N$)-1)
4891 OPEN FILENAME$ FOR OUTPUT AS #1
4901 GOTO 5001
4902 PRINT "DO YOU WANT A NEW FILE CREATED FOR THIS DATA (Y OR N):";
4903 INPUT Z$
4904 IF Z$="N" THEN 4891
4911 OPEN "B:WORK3.FIL" FOR INPUT AS #1
4921 INPUT #1, X0
4931 X0=X0+1
4941 CLOSE #1
4951 OPEN "B:WORK3.FIL" FOR OUTPUT AS #1
4961 WRITE #1, X0
4971 CLOSE #1
4972 E1=LEN(STR$(X0))
4981 FILENAME$="B:WORK"+RIGHT$(STR$(X0),E1-1)+".FIL"
4991 OPEN FILENAME$ FOR OUTPUT AS #1
5001 WRITE #1, O$,B$,Y$,D5,N$
5002 FOR XX=1 TO 13:FOR YY=1 TO 8:WRITE #1, M(XX,YY):NEXT YY:NEXT XX
5011 WRITE #1, C$,D$,E$,F$,G$,H$
5021 WRITE #1, I$,J$,K$,L$,M$
5031 WRITE #1, P$,R$,S$,T$,U$,V$
5041 WRITE #1, W$,X$,D0,D1,D2,D3
5051 WRITE #1, D4,D6,D7
5061 CLOSE #1
5071 PRINT "DONE" :BEEP:BEEP
5075 CLEAR ,,10000:GOSUB 31000

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5081 GOSUB 10600:GOTO 10650
6000 'ERROR CONTROL ROUTINE
6005 WAIST$="CALL THE AUTHORS AT 301-671-2494/2610"
6010 IF ERR=7 THEN 6150
6020 IF ERR=10 THEN 6170
6030 IF ERR=27 THEN 6190
6040 IF ERR=51 THEN 6210
6050 IF ERR=52 THEN 6230
6060 IF ERR=53 THEN 6250
6070 IF ERR=55 THEN 6270
6080 IF ERR=58 THEN 6290
6090 IF ERR=61 THEN 6320
6100 IF ERR=62 THEN 6340
6110 IF ERR=64 THEN 6360
6120 IF ERR=67 THEN 6380
6130 IF ERR=70 THEN 6400
6140 IF ERR=71 THEN 6420
6145 IF ERR=72 THEN 6440 ELSE CLS:LOCATE 10,1:PRINT "CIM SELF-CHECK...":PRINT "A
RTIFICIAL INTELLIGENCE DETECTS AN ERROR OR IMPROPER USER ACCESS ATTEMPT":END
6150 CLS:LOCATE 10,10:PRINT "STACK OVERFLOW..."
6151 LOCATE 11,10:PRINT WAIST$
6152 GOTO 6443
6170 RESUME
6190 CLS:LOCATE 10,10:PRINT "YOUR PRINTER IS EITHER OUT OF PAPER OR IS NOT TURNED ON...":GOTO 6443
6210 CLS:BEEP:BEEP:LOCATE 10,10:PRINT "INTERNAL MACHINE ERROR!!"
6211 LOCATE 11,10:PRINT "PLEASE REBOOT SYSTEM AND TRY AGAIN!!"
6212 LOCATE 12,10:PRINT "IF THIS ERROR HAPPENS AGAIN THEN CONTACT MR. GARY T. NO
LAN FOR REPAIR INFORMATION":GOTO 6443
6230 CLS:LOCATE 10,10:PRINT "BAD FILE NUMBER..."
6232 LOCATE 12,10:PRINT WAIST$
6233 RESTORE
6234 FOR EE=1 TO 18
6235 READ NUTS
6236 IF ERL=NUTS THEN PRINT "ERROR OCCURED IN LINE";NUTS:RESTORE:END
6237 NEXT EE:LOCATE 13,10:PRINT "ERROR NOT LOCATED":RESTORE:GOTO 6443
6238 DATA 481,491,651,661,4981,4991,7571,7581,7891
6239 DATA 7901,8211,8221,8631,8641,8951,8961,9031,9041
6240 DATA 4891
6250 CLS:GOTO 18500 :LOCATE 10,10:PRINT "FILE NOT FOUND..."
6251 LOCATE 11,10:PRINT "FILE HAS BEEN ERASED OR YOU HAVE PUT THE WRONG"
6252 LOCATE 12,10:PRINT "DISK IN DRIVE B:"
6253 LOCATE 13,10:PRINT "CHANGE DISK AND PRESS ANY KEY TO RETURN TO PROGRAM"
6254 K$=INKEY$:IF LEN(K$)=0 THEN 6254 ELSE RESTORE:RESUME
6270 CLS:LOCATE 10,10:PRINT "FILE ALREADY OPEN..."
6272 LOCATE 12,10:PRINT WAIST$
6273 RESTORE 6278
6274 FOR EE=1 TO 18
6275 READ NUTS
6276 IF ERL=NUTS THEN PRINT "ERROR OCCURED IN LINE";NUTS:RESTORE:END
6277 NEXT EE:LOCATE 13,10:PRINT "ERROR NOT LOCATED":RESTORE:GOTO 6443
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6278 DATA 481,491,651,661,4981,4991,7571,7581,7891
6279 DATA 7901,8211,8221,8631,8641,8951,8961,9031,9041
6280 DATA 4891
6290 CLS:LOCATE 10,10:PRINT "FILE ALREADY EXISTS..."
6291 LOCATE 11,10:PRINT "DANGER: DISK FILE(S) MAY BE OVER-WRITTEN"
6292 LOCATE 12,10:PRINT WAIST\$:GOTO 6443
6320 CLS:LOCATE 10,10:PRINT "DISK FULL..."
6321 LOCATE 11,10:PRINT "END PROGRAM OR PLACE A DIFFERENT DISK IN DRIVE B:"
6322 LOCATE 12,10:PRINT WAIST\$
6323 LOCATE 13,10:PRINT "PRESS ANY KEY TO RETURN TO PROGRAM"
6324 K\$=INKEY\$:IF LEN(K\$)=0 THEN 6324 ELSE RESTORE:RESUME
6340 CLS:LOCATE 10,10:PRINT "INPUT PAST END...":RESTORE 6348
6341 LOCATE 11,10:PRINT "ARTIFICIAL INTELLIGENCE LOCATING PROBLEM..."
6342 LOCATE 12,10:PRINT WAIST\$
6344 FOR EE=1 TO 18
6345 READ NUTS
6346 IF ERL=NUTS THEN PRINT "ERROR OCCURED IN LINE";NUTS:RESTORE:END
6347 NEXT EE:LOCATE 13,10:PRINT "ERROR NOT LOCATED":GOTO 6443
6348 DATA 481,491,651,661,4981,4991,7571,7581,7891
6349 DATA 7901,8211,8221,8631,8641,8951,8961,9031,9041
6350 DATA 4891
6360 CLS:LOCATE 10,10:PRINT " ERROR"
6362 LOCATE 12,10:PRINT WAIST\$
6363 RESTORE
6364 FOR EE=1 TO 18
6365 READ NUTS
6366 IF ERL=NUTS THEN PRINT "ERROR OCCURED IN LINE";NUTS:RESTORE:GOTO 6443
6367 NEXT EE:LOCATE 13,10:PRINT "ERROR NOT LOCATED":RESTORE:GOTO 6443
6368 DATA 481,491,651,661,4981,4991,7571,7581,7891
6369 DATA 7901,8211,8221,8631,8641,8951,8961,9031,9041
6380 CLS:LOCATE 10,10:PRINT "TOO MANY FILES..."
6382 LOCATE 12,10:PRINT WAIST\$
6383 RESTORE
6384 FOR EE=1 TO 18
6385 READ NUTS
6386 IF ERL=NUTS THEN PRINT "ERROR OCCURED IN LINE";NUTS:RESTORE:GOTO 6443
6387 NEXT EE:LOCATE 13,10:PRINT "ERROR NOT LOCATED":RESTORE:GOTO 6443
6388 DATA 481,491,651,661,4981,4991,7571,7581,7891
6389 DATA 7901,8211,8221,8631,8641,8951,8961,9031,9041
6390 DATA 4891
6391 LOCATE 14,10:PRINT "PLACE ANOTHER DISK IN DRIVE B: AND PRESS ANY KEY"
6392 LOCATE 15,10:PRINT "TO RETURN TO PROGRAM"
6393 K\$=INKEY\$:IF LEN(K\$)=0 THEN 6393 ELSE RESTORE:CLS:RESUME
6400 CLS:LOCATE 10,10:PRINT "THE DISK IN DRIVE B: IS WRITE PROTECTED..."
6401 LOCATE 11,10:PRINT "REMOVE THE WRITE PROTECT TAB AND TRY AGAIN"
6402 LOCATE 12,10:PRINT "PRESS ANY KEY TO RETURN TO PROGRAM"
6403 K\$=INKEY\$:IF LEN(K\$)=0 THEN 6403 ELSE RESTORE:RESUME
6420 CLS:LOCATE 10,10:PRINT "DISK NOT READY..."
6421 LOCATE 11,10:PRINT "CLOSE DOOR OR PLACE NEW DISK IN DRIVE B:"

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6422 LOCATE 12,10:PRINT "PRESS ANY KEY TO RETURN TO PROGRAM"
6423 K$=INKEY$ :IF LEN(K$)=0 THEN 6423 ELSE RESTORE:RESUME
6440 CLS:LOCATE 10,10:PRINT "DISK MEDIA ERROR (BAD DISK)..."
6441 LOCATE 11,10:PRINT "IMMEDIATELY COPY FILES TO NEW DISK AND RETRY PROGRAM"
6442 END
6443 IF ERR<>27 THEN 6445 ELSE LOCATE 11,10
6444 PRINT "ENTER <P> TO RESUME PRINTING OR <RET> TO CONTINUE";:INPUT K$:IF K$<>
"P" THEN 6445 ELSE RESUME
6445 LOCATE 15,10:PRINT "END PROGRAM OR RETURN TO MAIN MENU (E OR R)";:INPUT ERR
END$:IF ERREND$<>"E" THEN GOSUB 10600 ELSE END
6446 GOTO 10650
7431 CLS
7432 COLOR 0,7
7433 PRINT TAB(10) "
"
7441 PRINT TAB(10) " ##### SUM ALL WO #####
"
7442 PRINT TAB(10) "
"
7443 COLOR 10,0
7444 PRINT
7471 PRINT "ENTER SO# (4DIGITS)";
7481 INPUT Q$
7491 FOR XX=1 TO 13:FOR YY=1 TO 8: S(XX,YY)=0:NEXT YY:NEXT XX
7501 OPEN "B:WORK3.FIL" FOR INPUT AS #1
7511 INPUT #1, X0
7521 CLOSE #1
7531 CLS
7541 PRINT "SO# ";Q$,"WORK ORDER SUM"
7551 PRINT "";SO#","CC","
"
7561 FOR L=4 TO X0
7562 E1=LEN(STR$(L))
7571 FILENAME$="B:WORK"+RIGHT$(STR$(L),E1-1)+".FIL"
7581 OPEN FILENAME$ FOR INPUT AS #1
7591 INPUT #1, O$,B$,Y$,D5
7601 Z$=LEFT$(O$,4)
7611 IF Q$<>Z$ OR D5<>1 THEN 7700
7621 INPUT #1, N$
7622 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
7631 FOR K=1 TO 8
7641 FOR J=1 TO 13
7651 S(J,K)=S(J,K)+INT(M(J,K))
7661 NEXT J
7671 NEXT K
7681 PRINT O$,B$;" ";Y$;
7691 PRINT TAB(54) INT(M(13,8))
7700 CLOSE #1
7701 NEXT L
7721 PRINT "TOTAL WORK ORDER $: ";S(13,8)
7731 FOR XX=1 TO 13:FOR YY=1 TO 8:M(XX,YY)=S(XX,YY):NEXT YY:NEXT XX
7732 COLOR 26,0:LOCATE 22,25:PRINT "PRESS ANY KEY TO RETURN TO MENU":COLOR 7,0

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```

7733 K$=INKEY$:IF LEN(K$)=0 THEN 7733 ELSE BEEP:BEEP
7741 GOSUB 10600:RETURN 10650
7751 CLS
7752 COLOR 0,7
7753 PRINT TAB(10) "
"
7761 PRINT TAB(10) " ##### SUM ALL JO #####
"
7762 PRINT TAB(10) "
"
7763 COLOR 10,0
7764 PRINT
7791 PRINT "ENTER SO# (4DIGITS)";
7801 INPUT Q$
7811 FOR XX=1 TO 13:FOR YY=1 TO 8: S(XX,YY)=0:NEXT YY:NEXT XX
7821 OPEN "B:WORK3.FIL" FOR INPUT AS #1
7831 INPUT #1, X0
7841 CLOSE #1
7851 CLS
7861 PRINT "SO# ";Q$,"JOB ORDER SUM"
7871 PRINT ""; "SO#","CC","
7881 FOR L=4 TO X0
7882 E1=LEN(STR$(L))
7891 FILENAME$="B:WORK"+RIGHT$(STR$(L),E1-1)+".FIL"
7901 OPEN FILENAME$ FOR INPUT AS #1
7911 INPUT #1, O$,B$,Y$,D5
7921 Z$=LEFT$(O$,4)
7931 IF Q$<>Z$ OR D5<>2 THEN 8012
7941 INPUT #1, N$
7942 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
7951 FOR K=1 TO 8
7961 FOR J=1 TO 13
7971 S(J,K)=S(J,K)+INT(M(J,K))
7981 NEXT J
7991 NEXT K
8001 PRINT O$,B$;" ";Y$;
8011 PRINT TAB(54) INT(M(13,8))
8012 CLOSE #1
8021 NEXT L
8041 PRINT "TOTAL JOB ORDER $: ";S(13,8)
8051 FOR XX=1 TO 13:FOR YY=1 TO 8:M(XX,YY)=S(XX,YY):NEXT YY:NEXT XX
8052 COLOR 26,0:LOCATE 22,25:PRINT "PRESS ANY KEY TO RETURN TO MENU":COLOR 7,0
8053 K$=INKEY$:IF LEN(K$)=0 THEN 8053 ELSE BEEP:BEEP
8061 GOSUB 10600:RETURN 10650
8071 CLS
8072 COLOR 0,7
8073 PRINT TAB(10) "
"
8081 PRINT TAB(10) " ##### SUM CC: WO #####

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8082 PRINT TAB(10) "
"
8083 COLOR 10,0
8084 PRINT
8111 PRINT "ENTER COST CENTER (EX PJ3) ";
8121 INPUT Q$
8131 FOR XX=1 TO 13:FOR YY=1 TO 8: S(XX,YY)=0:NEXT YY:NEXT XX
8141 OPEN "B:WORK3.FIL" FOR INPUT AS #1
8151 INPUT #1, X0
8161 CLOSE #1
8171 CLS
8181 PRINT "CC:”;Q$,"WORK ORDER SUM"
8191 PRINT ""; "SO#", "CC", "
8201 FOR L=4 TO X0
8202 E1=LEN(STR$(L))
8211 FILENAME$="B:WORK"+RIGHT$(STR$(L),E1-1)+".FIL"
8221 OPEN FILENAME$ FOR INPUT AS #1
8231 INPUT #1, O$,B$,Y$,D5
8241 IF Q$<>B$ OR D5<>1 THEN 8322
8251 INPUT #1, N$
8252 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
8261 FOR K=1 TO 8
8271 FOR J=1 TO 13
8281 S(J,K)=S(J,K)+INT(M(J,K))
8291 NEXT J
8301 NEXT K
8311 PRINT O$,B$;" ";Y$;
8321 PRINT TAB(54) INT(M(13,8))
8322 CLOSE #1
8331 NEXT L
8351 PRINT "TOTAL WORK ORDER $ FOR :";Q$;" $";S(13,8)
8361 GOTO 8371
8371 FOR XX=1 TO 13:FOR YY=1 TO 8:M(XX,YY)=S(XX,YY):NEXT YY:NEXT XX
8372 COLOR 26,0:LOCATE 22,25:PRINT "PRESS ANY KEY TO RETURN TO MENU":COLOR 7,0
8373 K$=INKEY$:IF LEN(K$)=0 THEN 8373 ELSE BEEP:BEEP
8381 GOSUB 10600:RETURN 10650
8391 CLS :CLOSE #1
8392 COLOR 0,7
8393 PRINT TAB(10) "
"
8401 PRINT TAB(10) " ***** SUM CC: JO *****
"
8411 PRINT TAB(10) " ***** SUM SO# JO *****
"
8412 PRINT TAB(10) "
"
8413 COLOR 10,0
8414 PRINT
8441 PRINT "ENTER 1-COST CENTER SUM ROUTINE 2-SO# SUM ROUTINE ";
8451 INPUT Z4
8461 IF Z4=2 THEN 8501

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8471 PRINT "ENTER COST CENTER (EX-PJ3) ";
8481 INPUT Q$
8491 GOTO 8521
8501 PRINT "ENTER SO#(6 DIGITS) (EX 7947-10) ";
8511 INPUT Q$
8521 FOR XX=1 TO 13:FOR YY=1 TO 8: S(XX,YY)=0:NEXT YY:NEXT XX
8531 OPEN "B:WORK3.FIL" FOR INPUT AS #1
8541 INPUT #1, XO
8551 CLOSE #1
8561 CLS
8571 IF Z4=2 THEN 8601
8581 PRINT "CC: ";Q$,"JOB ORDER SUM"
8591 GOTO 8611
8601 PRINT "SO# ";Q$,"JOB ORDER SUM"
8611 PRINT ""; "SO#", "CC", " " GRAND TOTAL"; ""
8621 FOR L=4 TO XO
8622 E1=LEN(STR$(L))
8631 FILENAME$="B:WORK"+RIGHT$(STR$(L),E1-1)+".FIL"
8641 OPEN FILENAME$ FOR INPUT AS #1
8651 INPUT #1, O$,B$,Y$,D5
8661 IF Z4=2 THEN 8691
8671 IF Q$<>B$ OR D5<>2 THEN 8782
8681 GOTO 8711
8691 Z$=LEFT$(O$,7)
8701 IF Q$<>Z$ OR D5<>2 THEN 8782
8711 INPUT #1, N$
8712 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
8721 FOR K=1 TO 8
8731 FOR J=1 TO 13
8741 S(J,K)=S(J,K)+M(J,K)
8751 NEXT J
8761 NEXT K
8771 PRINT O$,B$;" ";Y$;
8781 PRINT TAB(54) M(13,8)
8782 CLOSE #1
8791 NEXT L
8811 PRINT "TOTAL JOB ORDER $ UNDER :";Q$;" $";S(13,8)
8821 FOR XX=1 TO 13:FOR YY=1 TO 8:M(XX,YY)=S(XX,YY):NEXT YY:NEXT XX
8822 COLOR 26,0:LOCATE 22,25:PRINT "PRESS ANY KEY TO RETURN TO MENU":COLOR 10,0
8823 K$=INKEY$:IF LEN(K$)=0 THEN 8823 ELSE BEEP:BEEP
8831 GOSUB 10600:RETURN 10650
8841 CLS
8842 COLOR 0,7
8843 PRINT TAB(10) "
  "
8851 PRINT TAB(10) " ***** OUTPUT SUBROUTINE *****"
*** "
8861 PRINT TAB(10) " ***** S/O *****"
*** "
8871 PRINT TAB(10) "
  "

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8872 COLOR 10,0
8873 PRINT
8881 PRINT "ENTER S/O# (EXAMPLE 7947-10-001) ";
8891 INPUT Z$
8901 REM OUTPUT OF A SO #
8911 OPEN "B:WORK3.FIL" FOR INPUT AS #1
8921 INPUT #1, XO
8931 CLOSE #1
8941 FOR J=4 TO XO
8942 E1=LEN(STR$(J))
8951 FILENAME$="B:WORK"+RIGHT$(STR$(J),E1-1)+".FIL"
8961 OPEN FILENAME$ FOR INPUT AS #1
8971 INPUT #1, O$
8981 CLOSE #1
8991 IF O$<>Z$ THEN 9021
9001 NO=J
9011 GOTO 9031
9021 NEXT J
9022 E1=LEN(STR$(NO))
9031 FILENAME$="B:WORK"+RIGHT$(STR$(NO),E1-1)+".FIL"
9041 OPEN FILENAME$ FOR INPUT AS #1
9051 GOTO 681
9061 GOSUB 10600:RETURN 10650
9071 REM
9231 REM
9241 CLS
9251 COLOR 7,0:LOCATE 1,28:PRINT "*** FILE DELETION ROUTINE ***:COLOR 10,0:PRINT
9261 Q$="LIST":GOTO 401
9271 KILL FILENAME$
9281 OPEN" B:WORK3.FIL" FOR INPUT AS #1
9300 INPUT #1,X0
9310 X0=X0-1
9320 CLOSE
9330 OPEN" B:WORK3.FIL" FOR OUTPUT AS #1
9340 WRITE #1,X0
9350 CLOSE
9355 FOR EBAD=C1+4 TO X0+1
9360 E1=LEN(STR$(EBAD))
9365 FILENAME1$="B:WORK"+RIGHT$(STR$(EBAD),E1-1)+".FIL"
9370 E1=LEN(STR$(EBAD-1))
9375 FILENAME2$="B:WORK"+RIGHT$(STR$(EBAD-1),E1-1)+".FIL"
9380 NAME FILENAME1$ AS FILENAME2$
9385 NEXT EBAD
9390 PRINT "DELETION COMPLETE ....":BEEP:BEEP:GOTO 257
10000 'WED PRINTOUT ROUTINE
10001 LPRINT CHR$(27) CHR$(71) CHR$(27) CHR$(52) CHR$(27) CHR$(14) "           WOR
K EXECUTION DOCUMENT"
10002 LPRINT CHR$(27) CHR$(64)
10010 LPRINT CHR$(134) TAB(2) CHR$(157) TAB(3) CHR$(152);:FOR L=4 TO 34:LPRINT C
HR$(157);:NEXT L:LPRINT TAB(35) CHR$(152);:FOR L=36 TO 64:LPRINT CHR$(157);:NEXT
L:LPRINT TAB(65) CHR$(152);:FOR L=66 TO 79:LPRINT CHR$(157);:NEXT L

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10015 LPRINT TAB(80) CHR\$(149);
10020 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(35) CHR\$(156) TAB(65) CHR\$(156) TAB(80) CHR\$(156);
10030 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) "TO CC: ";B\$ TAB(22) "DATE: ";D\$
TAB(35) CHR\$(156) TAB(37) "FROM CC: ";E\$ TAB(52) "DATE: ";G\$ TAB(65)
CHR\$(156) TAB(67) "APPROVED: ";H\$ TAB(80) CHR\$(156);
10040 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) "RESP PERSON: ";C\$ TAB(35) CHR\$(156)
TAB(37) "INITIATOR: ";F\$ TAB(65) CHR\$(156) TAB(67) "DATE: ";I\$ TAB(80) CHR\$(156)
;
10050 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(35) CHR\$(156) TAB(65) CHR\$(156) TAB(80) CHR\$(156);
10060 LPRINT CHR\$(156) TAB(3) CHR\$(150);:FOR L=4 TO 34:LPRINT CHR\$(157);:NEXT L:
LPRINT TAB(35) CHR\$(158);:FOR L= 36 TO 64:LPRINT CHR\$(157);:NEXT L:LPRINT TAB(65)
CHR\$(158);:FOR L=66 TO 79:LPRINT CHR\$(157);:NEXT L:LPRINT TAB(80) CHR\$(151);
10070 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(80) CHR\$(156);
10080 LPRINT CHR\$(156) TAB(3) CHR\$(156);
10081 IF D5=1 THEN LPRINT TAB(5) "WORK ORDER"; ELSE LPRINT TAB(5) "JOB ORDER";
10082 LPRINT TAB(22) "PLAN START DATE ";L\$ TAB(45) "PLAN END DATE ";M\$ TAB(67) "REV NO ";N\$ TAB(80) CHR\$(156);
10090 LPRINT CHR\$(156) TAB(2) "A" TAB(3) CHR\$(156) TAB(62) CHR\$(134);:FOR L=63 T
O 79:LPRINT CHR\$(157);:NEXT L:LPRINT TAB(80) CHR\$(151);
10100 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(62) CHR\$(156); TAB(69) "FUNDS"; TAB(80)
CHR\$(156);
10110 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) "ORDER NO ";O\$ TAB(25) "S O EXP
DATE ";P\$ TAB(49) "SOH CC ";R\$ TAB(62) CHR\$(156) TAB(63) "PRIOR ";D1 TAB(80) C
HR\$(156);
10120 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) "TITLE: ";S\$ TAB(43) "INT MGT CODE
";T\$ TAB(62) CHR\$(156) TAB(63) "INCREASE";D2 TAB(80) CHR\$(156);
10130 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(12);U\$ TAB(62) CHR\$(156) TAB(63)"DEC
REASE";D3 TAB(80)CHR\$(156);
10140 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(45) "TYPE ORDER ";
10141 IF D0=1 THEN LPRINT TAB(56) "SBR"; ELSE IF D0=2 THEN LPRINT TAB(56) "FP";
ELSE LPRINT TAB(56) "EXMPT";
10142 LPRINT TAB(62) CHR\$(156) TAB(63) "CURRENT ";D4 TAB(80) CHR\$(156);
10150 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(62) CHR\$(156) TAB(80)CHR\$(156);
10160 LPRINT CHR\$(150) TAB(2) CHR\$(157) TAB(3) CHR\$(159);:FOR L=4 TO 61 :LPRINT
CHR\$(157);:NEXT L:LPRINT TAB(62) CHR\$(158);:FOR L=63 TO 79:LPRINT CHR\$(157);:NEX
T L:LPRINT TAB(80) CHR\$(151);
10165 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(80) CHR\$(156);
10170 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) "DESCRIPTION OF WORK TO BE PERFOR
MED: " TAB(80) CHR\$(156);
10190 LPRINT CHR\$(156) TAB(2) "B" TAB(3) CHR\$(156) TAB(5) W\$ TAB(80) CHR\$(156);
10195 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) V\$ TAB(80) CHR\$(156);
10200 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(5) X\$ TAB(80) CHR\$(156);
10210 LPRINT CHR\$(150) TAB(2) CHR\$(157) TAB(3) CHR\$(159);:FOR L=4 TO 79:LPRINT C
HR\$(157);:NEXT L:LPRINT TAB(80) CHR\$(151);
10220 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(29) "PLANNED IN-HOUSE EXPENDITURES"
TAB(80) CHR\$(156);
10230 LPRINT CHR\$(150) TAB(2) CHR\$(157) TAB(3) CHR\$(159);:FOR L=4 TO 79:LPRINT C
HR\$(157);:NEXT L:LPRINT TAB(80) CHR\$(151);
10240 LPRINT CHR\$(156) TAB(3) CHR\$(156) TAB(80) CHR\$(156);

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APPENDIX B

COMPUTERIZED INFORMATION MANAGEMENT LISTINGS FOR THE TECTRONIX COMPUTER

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25010 COLOR 10,0:LOCATE 1,14:PRINT "PLACE BLANK ";:COLOR 26,0:PRINT "FORMATED DI
SK";:COLOR 10,0:PRINT " IN DRIVE B: AND PRESS RETURN":LOCATE 2,25:PRINT "(PRESS
ESC TO RETURN TO MENU)"
25020 GGG$=INKEY$:IF LEN(GGG$)=0 THEN 25020
25025 IF GGG$=CHR$(27) THEN 257
25030 BEEP:OPEN"B:WORK3.FIL" FOR OUTPUT AS #1
25040 WRITE #1,3
25050 CLOSE
25060 GOTO 257
30000 ESUM0=0:ESUM1=0:FOR TREKO=1 TO 4:ESUM0=ESUM0+INT(M(TREK,TREKO)/100+.5):NEX
T TREKO:ESUM1=ESUM0+INT(M(TREK,7)/100+.5):ESUM0=ESUM0/10:ESUM1=ESUM1/10:RETURN
31000 ' CLEAR DATA AND RESET ARRAYS
31010 DIM NUMS(13,8),M(13,8),S(13,8),S1(8),E1(8),H1(8),D1(8),F1(100),F9(100)
31020 N$="00"
31030 LOCATE ,1 : ON ERROR GOTO 6000
31040 DEF SEG=0 :POKE &H417,64
31050 RETURN
32000 CLS:COLOR 0,7
32010 PRINT TAB(10) "
"
32020 PRINT TAB(10) "
"
32030 PRINT TAB(10) "
"
32040 PRINT TAB(10) "
"
32050 PRINT TAB(10) "
"
":COLOR 10,0:PRINT
32060 PRINT "ENTER THE IDN/SO NO. ";:INPUT I$:GOTO 16261
32100 PRINT:PRINT "
L C/F TOTAL" 1 QTR 2 QTR 3 QTR 4 QTR TOTA
32110 PRINT TAB(3) "TOT CIV D/L HRS" TAB(23);
32120 PRINT USING " #####";H1(1),H1(2),H1(3),H1(4),H1(5),H1(7),H1(8)
32130 PRINT TAB(3) "TOT FUNDS I/H " TAB(23);
32140 PRINT USING " ####.#";S1(1),S1(2),S1(3),S1(4),S1(5),S1(7),S1(8)
32150 PRINT TAB(3) "TOT EXTERNAL " TAB(23);
32160 PRINT USING " ####.#";E1(1),E1(2),E1(3),E1(4),E1(5),E1(7),E1(8)
32170 PRINT TAB(3) "TOT PROJ FUND RQ'D" TAB(23);
32180 PRINT USING " ####.#";S1(1)+E1(1),S1(2)+E1(2),S1(3)+E1(3),S1(4)+E1(4),S1(
5)+E1(5),S1(7)+E1(7),S1(8)+E1(8):PRINT SPACE$(80)
32190 IF H1(8)=0 THEN SBR=0
32200 IF H1(8)=0 THEN 32220
32210 SBR=(AF1+S1(8))*1000/H1(8)
32220 PRINT USING "####.#"; "COMMENTS: SBR = ",SBR:PRINT USING "####.# ";
AIF =",AF1,"MAT =",BUD(5),"TVL =",BUD(1),"EQP =",BUD(8),"MISC =",BUD(2):
PRINT USING "####.# ";
NAF =",NF1,"CTR =",BUD(6),"OGA =",BUD(7)
32230 CLEAR ,10000:GOSUB 31000:COLOR 26,0:LOCATE 23,25:PRINT "PRESS ANY KEY TO
RETURN TO MENU":COLOR 10,0
32240 K$=INKEY$:IF LEN(K$)=0 THEN 32240 ELSE GOTO 257

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18022 IF K%>64 THEN 32100
18068 COLOR 3,0
18069 PRINT:PRINT "PRINTING...":COLOR 10,0
18070 LPRINT SPACE$(80)
18071 LPRINT TAB(3) "TOT CIV D/L HRS" TAB(23);
18072 LPRINT USING " #####";H1(1),H1(2),H1(3),H1(4),H1(5),H1(7),H1(8)
18079 LPRINT TAB(3) "TOT FUNDS I/H" TAB(23);
18080 LPRINT USING " ####.#";S1(1),S1(2),S1(3),S1(4),S1(5),S1(7),S1(8)
18089 LPRINT TAB(3) "TOT EXTERNAL" TAB(23);
18090 LPRINT USING " ####.#";E1(1),E1(2),E1(3),E1(4),E1(5),E1(7),E1(8)
18099 LPRINT TAB(3) "TOT PROJ FUND RQ'D" TAB(23);
18100 LPRINT USING " ####.#";S1(1)+E1(1),S1(2)+E1(2),S1(3)+E1(3),S1(4)+E1(4),S1
(5)+E1(5);
18110 LPRINT USING " ####.#";S1(7)+E1(7),S1(8)+E1(8):LPRINT SPACE$(80)
18131 IF H1(8)=0 THEN SBR=0
18132 IF H1(8)=0 THEN 18134
18133 SBR=(AF1+S1(8))*1000/H1(8)
18134 LPRINT USING "####.#"; "COMMENTS: SBR = ",SBR:LPRINT USING "####.#" ";
AIF =",AF1,"MAT =",BUD(5),"TVL =",BUD(1),"EQP =",BUD(8),"MISC =",BUD(2):
LPRINT USING "####.#" ";" NAF =",NF1,"CTR =",BUD(6),"OGA =",BUD(7)
18135 FOR OLIVIA=1 TO 19-R1:LPRINT:NEXT OLIVIA
18136 LPRINT "SO HOLDER/REVIEWER           TYPE/PRINTED           SIGNED
DATE"
18137 LPRINT "PROJECT OFFICER:";LPRINT "PROGRAM ANALYST:"
18139 LPRINT CHR$(27) "E":LPRINT CHR$(27) "4";:LPRINT CHR$(27)CHR$(14);:LPRINT
"MUNITIONS DIRECTORATE US ARMY CRDC, APG":LPRINT CHR$(27) CHR$(64)
18140 LPRINT:LPRINT:LPRINT:LPRINT:CLS:RETURN
18500 COLOR 12,0:PRINT "SALES ORDER NOT FOUND"
18510 PRINT "YOU HAVE EITHER"
18520 PRINT "1 ) PREVIOUSLY REMOVED THE INFORMATION"
18530 PRINT "2 ) PUT THE WRONG DISK IN DRIVE B:"
18540 PRINT "3 ) ENTERED AN INVALID SALES ORDER NUMBER"
18550 PRINT "EITHER PLACE A NEW DISK IN DRIVE B: AND HIT RETURN"
18560 PRINT "OR ENTER A NEW SALES ORDER NUMBER AND HIT RETURN"
18570 INPUT Z$
18580 COLOR 10,0:IF Z$="" THEN RESTORE:RESUME
18590 IF LEN(Z$)<=11 THEN RESTORE :GOTO 8901
20000 'TITLE PAGE
20010 GOSUB 10600 'BOX
20020 COLOR 12,0:LOCATE 4,23:PRINT "## WORK EXECUTION DOCUMENT PROGRAM ##"
20030 LOCATE 7,23:PRINT "           I.B.M. P.C. VERSION 2.0           "
20050 LOCATE 9,13:PRINT "WRITTEN BY: EDWARD F. DOYLE III AND R. ANDREW BLANKENBI
LLER"
20055 LOCATE 10,26:PRINT ""
20060 LOCATE 13,23:PRINT "           NOVEMBER 1984           "
20070 LOCATE 16,18:PRINT "US ARMY CHEMICAL RESEARCH AND DEVELOPMENT CENTER"
20080 LOCATE 17,25:PRINT "MUN DIR, MUN DEV BR   ATTN:SMCCR-MUC"
20090 LOCATE 18,23:PRINT "ABERDEEN PROVING GROUND, MARYLAND 21010"
20100 FOR L=1 TO 4000:NEXT L
20110 BEEP:BEEP: RETURN
25000 CLS

```

```

17908 E1=LEN(STR$(R)):FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL":OPEN FILENA
ME$ FOR INPUT AS #1:INPUT #1,A$,B$,Y$,D5,N$:FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #
1,M(XX,YY):NEXT YY:NEXT XX:CLOSE #1
17909 IF M(5,8)=0 THEN 17904
17910 TREK=5:GOSUB 30000:LPRINT "MISCELLANEOUS A" TAB(20) B$,:LPRINT USING" ##.
##.##;M(5,1)/1000,M(5,2)/1000,M(5,3)/1000,M(5,4)/1000,ESUM0,M(5,7)/1000,ESUM1
17970 NEXT R1
17980 GOSUB 17989
17981 NEXT L
17982 CLEAR ,10000:GOSUB 31000
17985 GOSUB 10600 :GOTO 10650
17989 IF L<>1 THEN 18135
17990 CLS
17991 COLOR 0,7
17992 PRINT TAB(10) "
"
17993 PRINT TAB(10) " ****
** "
17994 PRINT TAB(10) " **** SUM PRINT ****
** "
17995 PRINT TAB(10) " ****
** "
17996 PRINT TAB(10) "
":COLOR 6,0:PRINT:PRINT "CALCULATING...""
17997 FOR ED1=4 TO F0
17998 IF F1(ED1)=0 THEN 18015
17999 Z$=STR$(F1(ED1)):U$=MID$(Z$,5,3)
18000 IF U$="701" OR F1(ED1)<1000 THEN 18008
18001 FOR G=4 TO F0
18002 IF F1(ED1)=F9(G) THEN 18004
18003 NEXT G
18004 E1=LEN(STR$(G)):FILENAME$="B:WORK"+RIGHT$(STR$(G),E1-1)+".FIL"
18005 OPEN FILENAME$ FOR INPUT AS #1:INPUT #1,A$,B$,Y$,D5,N$
18006 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1,M(XX,YY):NEXT YY:NEXT XX:CLOSE #1
18007 FOR I=1 TO 8:S1(I)=(INT(M(3,I)/100+.5))/10+S1(I):H1(I)=M(1,I)+H1(I):NEXT I

18008 FOR COORS=4 TO 11:IF COORS=6 OR COORS=7 THEN 18014
18009 IF M(COORS,8)=0 THEN 18014
18010 FOR F=1 TO 7:IF F=6 THEN 18012
18011 E1(F)=(INT(M(COORS,F)/100+.5))/10+E1(F)
18012 NEXT F
18013 TREK=COORS:GOSUB 30000:BUD(COORS-3)=BUD(COORS-3)+ESUM1
18014 NEXT COORS
18015 NEXT ED1
18016 S1(5)=S1(1)+S1(2)+S1(3)+S1(4)
18017 S1(8)=S1(5)+S1(7)
18018 E1(5)=E1(1)+E1(2)+E1(3)+E1(4)
18019 E1(8)=E1(5)+E1(7)
18020 AF1=BUD(1)+BUD(2)+BUD(5)+BUD(8)
18021 NF1=BUD(6)+BUD(7)

```

```

17640 IF N6<=F0 THEN 17970
17650 N7=N7+1
17660 IF N7>F0 THEN 17810
17670 IF F1(N7)=0 THEN 17650
17680 FOR R=4 TO F0
17690 IF F1(N7)=F9(R) THEN 17710
17700 NEXT R
17710 E1=LEN(STR$(R))
17720 FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL"
17725 OPEN FILENAME$ FOR INPUT AS #1
17730 INPUT #1,A$,B$,Y$,D5,N$
17731 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
17740 CLOSE #1
17750 IF M(10,8)=0 THEN 17650
17760 TREK=10:GOSUB 30000:LPRINT "OGA          N" TAB(20) B$;:LPRINT USING" #
###.##";M(10,1)/1000,M(10,2)/1000,M(10,3)/1000,M(10,4)/1000,ESUM0,M(10,7)/1000,ES
UM1
17790 IF N7<=F0 THEN 17970
17810 N3=N3+1
17820 IF N3>F0 THEN 17895
17830 IF F1(N3)=0 THEN 17810
17840 FOR R=4 TO F0
17850 IF F1(N3)=F9(R) THEN 17870
17860 NEXT R
17870 E1=LEN(STR$(R))
17880 FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL"
17885 OPEN FILENAME$ FOR INPUT AS #1
17890 INPUT #1,A$,B$,Y$,D5,N$
17891 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
17892 CLOSE #1
17893 IF M(4,8)=0 THEN 17810
17894 TREK=4:GOSUB 30000:LPRINT "TRAVEL      A" TAB(20) B$;:LPRINT USING" #
##.##";M(4,1)/1000,M(4,2)/1000,M(4,3)/1000,M(4,4)/1000,ESUM0,M(4,7)/1000,ESUM1:IF
N3<=F0 THEN 17970
17895 N4=N4+1:IF N4>F0 THEN 17904
17896 IF F1(N4)=0 THEN 17895
17897 FOR R=4 TO F0:IF F1(N4)=F9(R) THEN 17900
17899 NEXT R
17900 E1=LEN(STR$(R)):FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL":OPEN FILENA
ME$ FOR INPUT AS #1:INPUT #1,A$,B$,Y$,D5,N$:FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #
1,M(XX,YY):NEXT YY:NEXT XX:CLOSE #1
17901 IF M(11,8)=0 THEN 17895
17902 TREK=11:GOSUB 30000:LPRINT "EQUIPMENT      A" TAB(20) B$;:LPRINT USING" #
##.##";M(11,1)/1000,M(11,2)/1000,M(11,3)/1000,M(11,4)/1000,ESUM0,M(11,7)/1000,ES
UM1
17903 IF N4<=F0 THEN 17970
17904 N5=N5+1:IF N5>F0 THEN 17980
17905 IF F1(N5)=0 THEN 17904
17906 FOR R=4 TO F0:IF F1(N5)=F9(R) THEN 17908
17907 NEXT R

```

```

17070 FILENAME$="B:WORK"+RIGHT$(STR$(G),E1-1)+".FIL"
17075 PRINT FILENAME$
17080 OPEN FILENAME$ FOR INPUT AS #1
17090 INPUT #1,A$,B$,Y$,D5,N$
17095 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
17100 CLOSE #1
17250 'PRINT
17270 LPRINT TAB(3) "CIV D/L HRS *****;:LPRINT USING " #####;M(1,1),M(1,2)
),M(1,3),M(1,4),M(1,5),M(1,7),M(1,8)
17280 LPRINT TAB(3) "MIL D/L HRS ****"
17290 TREK=3:GOSUB 30000:LPRINT TAB(3) "FUNDS I/H" TAB(20) B$;:LPRINT USING " #
##.#";M(3,1)/1000,M(3,2)/1000,M(3,3)/1000,M(3,4)/1000,ESUM0,M(3,7)/1000,ESUM1
17309 IF F1(N1)=0 THEN 16960
17310 NEXT H
17311 'LPRINT SPACE$(80)
17312 LPRINT TAB(45) "EXTERNAL EFFORT"
17313 LPRINT "EXT PERF O/H TP ACC 1 QTR 2 QTR 3 QTR 4 QTR TOTAL
C/F TOTAL"
17320 FOR R1=0 TO 19
17330 N2=N2+1
17340 IF N2>FO THEN 17510
17350 IF F1(N2)=0 THEN 17330
17360 FOR R=4 TO FO
17370 IF F1(N2)=F9(R) THEN 17385
17380 NEXT R
17385 E1=LEN(STR$(R))
17390 FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL"
17400 OPEN FILENAME$ FOR INPUT AS #1
17410 INPUT #1,A$,B$,Y$,D5,N$
17411 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
17420 CLOSE #1
17440 IF M(8,8)=0 THEN 17330
17470 TREK=8:GOSUB 30000:LPRINT "MATERIAL      A" TAB(20) B$;:LPRINT USING" #
##.#";M(8,1)/1000,M(8,2)/1000,M(8,3)/1000,M(8,4)/1000,ESUM0,M(8,7)/1000,ESUM1
17500 IF N2<=FO THEN 17970
17510 N6=N6+1
17520 IF N6>FO THEN 17650
17530 IF F1(N6)=0 THEN 17510
17540 FOR R=4 TO FO
17550 IF F1(N6)=F9(R) THEN 17561
17560 NEXT R
17561 E1=LEN(STR$(R))
17562 FILENAME$="B:WORK"+RIGHT$(STR$(R),E1-1)+".FIL"
17570 OPEN FILENAME$ FOR INPUT AS #1
17580 INPUT #1,A$,B$,Y$,D5,N$
17581 FOR XX=1 TO 13:FOR YY=1 TO 8:INPUT #1, M(XX,YY):NEXT YY:NEXT XX
17590 CLOSE #1
17600 IF M(9,8)=0 THEN 17510
17610 TREK=9:GOSUB 30000:LPRINT "CONTRACT      N" TAB(20) B$;:LPRINT USING" #
##.#";M(9,1)/1000,M(9,2)/1000,M(9,3)/1000,M(9,4)/1000,ESUM0,M(9,7)/1000,ESUM1

```

```

16780 IF K=J THEN 16820
16790 IF INT(F1(J)/1000)-INT(F1(K)/1000)<>0 THEN 16820
16800 F1(J)=0
16810 GOTO 16850
16820 NEXT K
16830 IF V$="701" THEN 16850
16840 P9=P9+1
16850 NEXT J
16855 IF K%>64 THEN 17997
16860 P8=INT((P9+9)/10)
16870 FOR L=1 TO P8
16875 PRINT "PRINTING PAGE";L;"..."
16890 LPRINT CHR$(27) "E":LPRINT CHR$(27) "4";:LPRINT CHR$(27)CHR$(14);:LPRINT T
AB(11) "SALES ORDER MASTER PLAN" :LPRINT CHR$(27) CHR$(64)
16891 LPRINT CHR$(27) "E"
16900 LPRINT "IDN/SO NO. ";I$:TAB(20);"REV NO. ";J$:TAB(31);"REV DATE ";K$:TAB(4
7);"AMCCMS NO. ";L$:TAB(69);"PG ";L;"OF";P8
16910 LPRINT "PROJ NO ";P$:TAB(31);"PROJECT PLAN FOR ";Q$
16930 LPRINT "CUSTOMER ";R$:TAB(47);"SO CCN ";S$:TAB(69);"TYPE ";T$;
16940 LPRINT SPACE$(70)
16941 LPRINT TAB(3) "PRIOR YEAR CARRY-IN" TAB(34) "NEW FUNDS FOR TARGET FY" TAB(
66) " TOTAL FUNDS"
16942 LPRINT "N-UNOB AU/C - TOTAL 1 QTR 2 QTR 3 QTR 4 QTR TOTAL
AVAILABLE"
16943 LPRINT USING "###.# ";SEX1/1000,SEX2/1000,SEX3/1000;:LPRINT USING "###.
# ";CARRY(1)/1000,CARRY(2)/1000,CARRY(3)/1000,CARRY(4)/1000,CARRY(5)/1000;:LPRI
NT USING "###.#";CARRY(6)/1000
16944 LPRINT "***** TAB(40) "PLANNED/ACTUAL OBLIGATIONS"
16945 LPRINT "***** 1 QTR 2 QTR 3 QTR 4 QTR TOTAL
C/F TOTAL"
16946 LPRINT "*****;:LPRINT USING "###.#";KARRY(1)/1000,KAR
RY(2)/1000,KARRY(3)/1000,KARRY(4)/1000,KARRY(5)/1000,KARRY(6)/1000,KARRY(7)/1000
16947 LPRINT TAB(45) "INTERNAL EFFORT"
16948 LPRINT " RESOURCE ACC PCC 1 QTR 2 QTR 3 QTR 4 QTR TOTAL
C/F TOTAL"
16950 FOR H=0 TO 9
16960 N1=N1+1
16970 IF N1>FO THEN LPRINT TAB(3) "CIV D/L HRS *****:LPRINT TAB(3) "MIL D/L
HRS *****:LPRINT TAB(3) "FUNDS I/H":GOTO 17310
16980 IF F1(N1)=0 THEN 16960
16990 Z$=STR$(F1(N1))
17000 U$=MID$(Z$,5,3)
17010 IF U$="701" THEN 16960
17020 IF F1(N1)<1000 THEN 16960
17030 FOR G=4 TO FO
17040 IF F1(N1)=F9(G) THEN 17065
17050 NEXT G
17060 COLOR 12,0:PRINT "CIM SELF-CHECK ERROR...":COLOR 10,0
17065 E1=LEN(STR$(G))

```

```

16244 INPUT Z$
16245 IF Z$="N" THEN 16250
16246 PRINT "PRIOR YEAR CARRY-IN":PRINT " N-UNOBL = ";:INPUT SEX1:PRINT " A-U/C
= ";:INPUT SEX2:PRINT " TOTAL = ";:INPUT SEX3
16248 PRINT "NEW FUNDS FOR TARGET FY":FOR J=1 TO 4:PRINT J;"QTR = ";:INPUT CARRY
(J):NEXT J:PRINT " TOTAL = ";:INPUT CARRY(5):PRINT " TOTAL FUNDS AVAILABLE = ";:
INPUT CARRY(6)
16249 PRINT "PLANNED/ACTUAL OBLIGATIONS":FOR J=1 TO 4:PRINT J;"QTR = ";:INPUT KA
RRY(J):NEXT J:PRINT " TOTAL = ";:INPUT KARRY(5):PRINT " C/F = ";:INPUT KARRY(6):
PRINT " TOTAL = ";:INPUT KARRY(7)
16250 PRINT:COLOR 26,0:PRINT TAB(17) " PRESS RETURN WHEN READY ";:BEEP:
BEEP
16260 INPUT Z$
16261 COLOR 6,0:PRINT:PRINT "CALCULATING...":PRINT:COLOR 3,0
16270 OPEN "B:WORK3.FIL" FOR INPUT AS #1
16280 INPUT #1,FO
16290 CLOSE #1
16350 N1=3:N2=3:N3=3:N4=3:N5=3:N6=3:N7=3
16460 FOR J=4 TO FO
16465 E1=LEN(STR$(J))
16470 FILENAME$="B:WORK"+RIGHT$(STR$(J),E1-1)+".FIL"
16480 OPEN FILENAME$ FOR INPUT AS #1
16490 INPUT #1,A$
16500 CLOSE #1
16510 Z$=LEFT$(A$,4)
16520 IF Z$<>I$ THEN 16590
16530 U$=MID$(A$,6,2)
16540 V$=MID$(A$,9,3)
16550 W$=U$+V$
16560 F1(J)=VAL(W$)
16570 IF F1(J)>100 OR U$="00" THEN 16590
16580 F1(J)=F1(J)*1000
16590 NEXT J
16600 FOR XX=4 TO FO: F9(XX)=F1(XX):NEXT XX
16610 REM SORT
16620 FOR K=4 TO FO
16630 FOR J=4 TO FO
16640 F3=F1(J)
16650 IF F1(J)<F1(K) THEN 16680
16660 F1(J)=F1(K)
16670 F1(K)=F3
16680 NEXT J
16690 NEXT K
16700 REM DEL
16710 FOR J=4 TO FO
16720 IF F1(J)=0 THEN 16850
16730 U$=STR$(F1(J))
16740 V$=RIGHT$(U$,3)
16750 IF F1(J)<1000 THEN 16850
16760 IF V$<>"000" AND V$<>"00" THEN 16830
16770 FOR K=4 TO FO

```

```
14000 'EXCHANGE ARRAYS
14010 FOR XX=1 TO 6
14020 FOR YY=1 TO 8
14030 NUMS(XX,YY)=M(XX,YY)
14040 NEXT YY
14050 NEXT XX
14060 FOR XX=7 TO 13
14070 FOR YY=1 TO 8
14080 NUMS(XX,YY)=M(XX,YY)
14090 NEXT YY
15000 NEXT XX
15010 RETURN
16000 CLS:CLEAR ,,10000:GOSUB 31000
16001 COLOR 0,7
16002 PRINT TAB(10) "
"
16010 PRINT TAB(10) " ****
*** "
16020 PRINT TAB(10) " **** SALES ORDER MASTER PLAN ****
*** "
16030 PRINT TAB(10) " **** WORK FORM ****
*** "
16050 PRINT TAB(10) " ****
*** "
16051 PRINT TAB(10) "
"
16052 COLOR 12,0
16053 PRINT
16060 PRINT "ENTER THE FOLLOWING : "
16070 PRINT "IDN/SO NO. ";
16080 INPUT I$
16090 PRINT "REV NO. ";
16100 INPUT J$
16110 PRINT "REV DATE ";
16120 INPUT K$
16130 PRINT "AMCCMS NO. ";
16140 INPUT L$
16150 PRINT "PROJ NO. ";
16160 INPUT P$
16170 PRINT "PROJECT PLAN FOR ";
16180 INPUT Q$
16190 PRINT "CUSTOMER ";
16200 INPUT R$
16210 PRINT "S.O. CCN ";
16220 INPUT S$
16230 PRINT "TYPE ";
16240 INPUT T$
16241 PRINT "DO YOU WISH TO INCLUDE <CARRY-IN>, <NEW FUNDS FOR TARGET FY>, AND/OR"
16242 PRINT "<PLANNED/ACTUAL OBLIGATIONS> WITH THE OTHER HEADER INFORMATION ON"
16243 PRINT "YOUR SQMP PRINTOUT. NOTE THAT THESE ARE NOT STORED ON DISK. (Y OR N
):";
```

```

10999 RETURN
11000 INTEML$=" ":"NTRY$=""":INLEN%=7:X=15:Y=9:GOTO 11160
11010 K$=INKEY$: IF LEN(K$)=0 THEN 11010
11020 IF LEN(K$)>1 THEN K%=ASC(RIGHT$(K$,1)):IF (K%=71 OR K%=72 OR K%=75 OR K%=7
7 OR K%=79 OR K%=80) THEN 11080 ELSE BEEP:GOTO 11010
11025 K%=ASC(K$)
11030 IF K%=13 THEN 11160
11040 IF K%=8 THEN 12210
11050 IF K%>=48 AND K%<=57 THEN 11180
11060 IF K%>57 OR (K%<48 AND K%>=32) THEN BEEP:GOTO 11010
11070 GOTO 11010
11080 IF K%=72 THEN Y=Y-1:IF Y<9 THEN Y=21
11090 IF Y=15 THEN Y=Y-1
11100 IF K%=77 THEN X=X+8:IF X>71 THEN X=15:Y=Y+1:IF Y>21 THEN Y=9
11110 IF K%=75 THEN X=X-8:IF X<14 THEN X=71:Y=Y-1:IF Y<9 THEN Y=21
11120 IF K%=80 THEN Y=Y+1:IF Y>21 THEN Y=9
11130 IF Y=15 THEN Y=Y+1
11140 IF K%=79 THEN RESTORE:GOSUB 13500:GOSUB 10600:GOTO 10650
11150 IF K%=71 THEN GOSUB 10841:RESTORE:GOTO 741
11160 I=Y-8:J=INT((X+1)/8)-1
11165 LOCATE 1,1,1:COLOR 12,0:PRINT I;J:COLOR 0,7:LOCATE 4,2,1:PRINT " " " :L
OCATE 4,2:ANDY$=STR$(NUMS(I,J)):PRINT MID$(ANDY$,2,7):LOCATE 4,11:COLOR 12,0:PRI
NT "CURRENT WINDOW VALUE":LOCATE Y,X,1:COLOR 3,0
11170 NTRY$="":GOTO 11010
11180 IF LEN(NTRY$)>=INLEN% THEN BEEP:GOTO 11010
11190 NTRY$=NTRY$+K$
11200 NUMS(I,J)=VAL(NTRY$):LOCATE Y,X,0:PRINT USING "#####";NUMS(I,J)
11210 GOTO 11010
12210 'BACKSPACE 1 CHARACTER
12220 IF LEN(NTRY$)=0 THEN BEEP:GOTO 11010
12230 PRINT CHR$(29);LEFT$(INTEML$,1);CHR$(29);
12240 NTRY$=LEFT$(NTRY$,LEN(NTRY$)-1)
12250 GOTO 11200
13000 '
13010 YAZ$ = STR$(M(J,L))
13020 WHILE LEN(YAZ$)<8
13030 YAZ$=" "+YAZ$
13040 WEND
13045 YAZ$=RIGHT$(YAZ$,7)
13050 RETURN
13500 'EXCHANGE ARRAYS
13510 FOR XX=1 TO 6
13520 FOR YY=1 TO 8
13530 M(XX,YY)=NUMS(XX,YY)
13540 NEXT YY
13550 NEXT XX
13560 FOR XX=7 TO 13
13570 FOR YY=1 TO 8
13580 M(XX,YY)=NUMS(XX,YY)
13590 NEXT YY
13600 NEXT XX
13610 RETURN

```

```

10600 'MENU BORDER ROUTINE
10610 COLOR 3,0:CLS
10620 LOCATE 1,2:PRINT CHR$(201);:FOR I=1 TO 76:PRINT CHR$(205);:NEXT I:PRINT CH
R$(187);:FOR I=2 TO 22:LOCATE I,2:PRINT CHR$(186):LOCATE I,79:PRINT CHR$(186);:N
EXT I
10630 LOCATE 23,2:PRINT CHR$(200);:FOR I=1 TO 76:PRINT CHR$(205);:NEXT I:PRINT C
HR$(188)
10640 RETURN
10650 K$="":CLOSE #1:'MAIN MENU ROUTINE
10660 COLOR 3,0:LOCATE 5,2:PRINT CHR$(204);:FOR L=3 TO 78:LOCATE 5,L:PRINT CHR$(205);:NEXT L:LOCATE 5,79:PRINT CHR$(185);
10665 RESTORE 10790
10670 FOR L=1 TO 4
10680 READ PY,PX,MEN$
10690 LOCATE PY,PX:PRINT MEN$
10700 NEXT L
10710 FOR L=1 TO 10
10720 READ PY,PX,MEN$
10730 LOCATE PY,PX:PRINT MEN$
10735 IF PY=17 THEN COLOR 12,0:LOCATE 17,14:PRINT "(DO NOT USE)":COLOR 3,0
10740 NEXT L
10750 FOR L=1 TO 10
10760 READ PY,PX,MEN$
10770 LOCATE PY,PX:PRINT CHR$(24);MEN$
10780 NEXT L
10790 DATA 3,10,"WORK EXECUTION DOCUMENT",3,50,"FUNCTION KEY DEFINITIONS",7,11,"
FUNCTION KEYS",7,53,"SHIFT FUNCTION KEYS"
10795 DATA 9,8,"F1 - INITIAL OUTPUT",10,8,"F2 - DISPLAY BLANK CHART",11,8,"F3
- DISPLAY DATA",12,8,"F4 - CALCULATE RESULTS",13,8,"F5 - FORMAT DATA DISK",14
,8,"F6 - SOMP TOTALS/NAIF/AIF"
10796 DATA 15,8,"F7 - ^",16,8,"F8 - PRINT SOMP",17,8,"F9 -",18,8,"F10 - RETUR
N TO DOS"
10797 DATA 9,52,"F1 - INITIAL INPUT",10,52,"F2 - PRINT WEDS",11,52,"F3 - SAVE
DATA",12,52,"F4 - REVISIONS",13,52,"F5 - OUTPUT ONE SO#"
10798 DATA 14,52,"F6 - ERASE DATA FILE",15,52,"F7 - SUM ALL W/O",16,52,"F8 -
SUM ALL J/O",17,52,"F9 - SUM W/O CC",18,52,"F10 - SUM J/O CC"
10799 COLOR 10,0:LOCATE 20,14:PRINT "PRESS ANY FUNCTION KEY WHEN READY TO RETURN
TO PROGRAM":LOCATE ,0
10800 SS$=INKEY$:IF SS$="" THEN 10800
10810 IF LEN(SS$)<2 THEN :BEEP:GOTO 10800 ELSE SS=ASC(RIGHT$(SS$,1))
10820 IF (SS>=84) AND (SS<=93) THEN K%=SS:CLS:RESTORE:CLOSE #1:GOTO 51
10821 IF (SS>=84) THEN 10822 ELSE 10830
10822 IF (SS<=93) THEN 10823 ELSE 10830
10823 K%=SS
10824 CLS
10825 RESTORE
10826 CLOSE #1
10827 GOTO 51
10830 IF (SS>=59) AND (SS<=68) THEN K%=SS:CLS:RESTORE:CLOSE #1:GOTO 142
10840 GOTO 10800
10841 'KEYPAD MENU ROUTINE
10845 'OMITTED IN THIS VERSION

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```

10250 LPRINT CHR$(156) TAB(3) CHR$(156) TAB(27) "CURRENT FY";J$ TAB(58) "BFY";K$  

    TAB(80) CHR$(156);  

10260 LPRINT CHR$(156) TAB(3) CHR$(156);:LPRINT TAB(5) "ELEMENTS 1ST-QTR 2ND-  

    QTR 3RD-QTR 4TH-QTR TOTAL 1ST-QTR C/F TOTAL ";:LPRINT TAB(80) CHR$(156);  

10265 LPRINT CHR$(156) TAB(3) CHR$(156) TAB(80) CHR$(156);  

10267 RESTORE 10330  

10270 FOR J=1 TO 6  

10280 READ LABEL$  

10290 IF J=3 THEN LPRINT CHR$(156) TAB(2) "C" TAB(3) CHR$(156); ELSE LPRINT CHR$  

    (156) TAB(3) CHR$(156);  

10300 LPRINT TAB(5) LABEL$;  

10310 FOR L=1 TO 8  

10311 GOSUB 13000  

10320 LPRINT TAB(9+8*L) YAZ$;:NEXT L:LPRINT TAB(80) CHR$(156);:LPRINT CHR$(156)  

    TAB(3) CHR$(156) TAB(80) CHR$(156);:NEXT J  

10330 DATA "CIV D/L HRS","MIL D/L HRS" , "TOTAL LAB $", "TRAVEL", "MISC", "SUB TOTAL  

"  

10340 LPRINT CHR$(150) TAB(2) CHR$(157) TAB(3) CHR$(159);:FOR L=4 TO 79:LPRINT C  

    HR$(157);:NEXT L:LPRINT TAB(80) CHR$(151);  

10350 LPRINT CHR$(156) TAB(3) CHR$(156) TAB(27) "PLANNED OUT OF HOUSE OBLIGATION  

    S" TAB(80) CHR$(156);  

10360 LPRINT CHR$(150) TAB(2) CHR$(157) TAB(3) CHR$(159);:FOR L=4 TO 79:LPRINT C  

    HR$(157);:NEXT L:LPRINT TAB(80) CHR$(151);  

10365 LPRINT CHR$(156) TAB(3) CHR$(156) TAB(80) CHR$(156);  

10370 FOR J=8 TO 12  

10380 READ LABEL$  

10390 IF J=9 THEN LPRINT CHR$(156) TAB(2) "D" TAB(3) CHR$(156); ELSE LPRINT CHR$  

    (156) TAB(3) CHR$(156);  

10400 LPRINT TAB(5) LABEL$;  

10410 FOR L=1 TO 8  

10411 GOSUB 13000  

10420 LPRINT TAB(9+8*L) YAZ$;:NEXT L:LPRINT TAB(80) CHR$(156);:LPRINT CHR$(156)  

    TAB(3) CHR$(156) TAB(80) CHR$(156);:NEXT J  

10430 DATA "TOTAL MAT", "TOTAL CONT", "TOTAL OGA", "TOTAL EQUIP", "SUB TOTAL"  

10440 LPRINT CHR$(150) TAB(2) CHR$(157) TAB(3) CHR$(159);:FOR L=4 TO 79:LPRINT C  

    HR$(157);:NEXT L:LPRINT TAB(80) CHR$(151);  

10450 READ LABEL$  

10460 LPRINT CHR$(156) TAB(2) "E" TAB(3) CHR$(156);  

10470 LPRINT TAB(5) LABEL$;  

10480 J=13:FOR L=1 TO 8  

10481 GOSUB 13000  

10490 LPRINT TAB(9+8*L) YAZ$;:NEXT L:LPRINT TAB(80) CHR$(156);  

10500 DATA "GRAND TOTAL"  

10510 LPRINT CHR$(153) TAB(2) CHR$(157) TAB(3) CHR$(158);:FOR L=4 TO 79:LPRINT C  

    HR$(157);:NEXT L:LPRINT TAB(80) CHR$(154);  

10511 LPRINT QS$  

10520 LPRINT  

10523 LPRINT CHR$(27) CHR$(71) CHR$(27) CHR$(52)  

10530 LPRINT CHR$(27) CHR$(14) "MUNITIONS DIRECTORATE US ARMY CRDC, APG"  

10540 LPRINT CHR$(27) CHR$(64)  

10550 LPRINT:GOSUB 10600:RETURN 10650

```

```
1 REM WORK EXECUTION DOCUMENT PROGRAM --JUNE 1983-- TEKTRONIX VERSION
2 REM EDWARD F DOYLE III AND R ANDREW BLANKENBILLER -- (301) 671-2494
4 RUN 100
8 RUN 570
12 RUN 1730
16 RUN 1420
20 PAGE
21 RUN 460
23 REM 24-LEFT(X) 28-RIGHT(X) 32-UP(Y) 36-DOWN(Y)
24 GOTO 1100
28 GOTO 1040
32 GOTO 1220
36 GOTO 1150
40 GOTO 1270
44 RUN 1860
48 RUN 5080
52 RUN 4830
56 RUN 1820
60 RUN 8710
64 RUN 8900
68 RUN 7420
72 RUN 7710
76 RUN 8000
80 RUN 8290
100 INIT
110 PAGE
120 O$=""
130 Y$=""
140 N$="00"
150 B$=""
160 IMAGE 54X,1A,7#
170 Z1=0
180 IMAGE 7D
190 PRINT " ***** WORK EXECUTION DOCUMENT PROGRAM *****"
200 PRINT " *****"
210 PRINT " ***** OUTPUT *****"
220 PRINT "JJJTHIS PROGRAM IS DESIGNED TO PRINT OUT THE "
230 PRINT "JWORK EXECUTION DOCUMENT FOR A PARTICULAR COST CENTER."
240 PRINT "JENTER SALES ORDER NUMBER (4DIGITS):";
250 INPUT Q$
260 PAGE
270 PRINT "SO# ";Q$
280 PRINT "JJJ";"SO#","CC";"J"
290 FIND 3
300 READ @33:X0
310 DIM F1(X0)
320 C1=0
330 FOR J=4 TO 3+X0
340 FIND J
350 READ @33:0$,B$,Y$
360 Z$=SEG(0$,1,4)
```

```

370 IF Q$="LIST" THEN 390
380 IF Q$<>Z$ THEN 420
390 C1=C1+1
400 PRINT "(";C1;") ";O$,B$,Y$
410 F1(C1)=J
420 NEXT J
430 IF C1>0 THEN 460
440 PRINT "NO DATA WAS FOUND UNDER THAT SO#G"
450 GOTO 240
460 PRINT "ENTER A # FROM THE LIST (1,2,3,...) ( )HHH";
470 INPUT C1
480 NO=F1(C1)
490 FIND NO
500 DIM M(13,8)
510 READ @33:O$,B$,Y$,D5,N$,M
520 READ @33:C$,D$,E$,F$,G$,H$
530 READ @33:I$,J$,K$,L$,M$
540 READ @33:P$,R$,S$,T$,U$,V$
550 READ @33:W$,X$,D0,D1,D2,D3
560 READ @33:D4,D6,D7
570 PAGE
580 G2=0
590 N=32
600 RESTORE
610 WINDOW 0,130,0,100
620 VIEWPORT 0,130,-5,125
630 FOR J=10 TO 80 STEP 5
640 MOVE @N:.75,J+1
650 READ Z$
660 PRINT @N:Z$
670 MOVE @N:0,J
680 DRAW @N:130,J
690 NEXT J
700 MOVE @N:0,10
710 DRAW @N:0,80
720 FOR J=20 TO 130 STEP 13.75
730 READ Z$
740 MOVE @N:J+1,76
750 PRINT @N:Z$
760 MOVE @N:J,10
770 DRAW @N:J,40
780 MOVE @N:J,45
790 DRAW @N:J,80
800 NEXT J
810 MOVE @N:93,78
820 PRINT @N:"BFY"
830 MOVE @N:130,40
840 DRAW @N:130,45
850 DAT "GRAND TOTAL","SUB TOTAL","TOTAL EQUIP","TOTAL OGA","TOTAL CONT"
860 DATA "TOTAL MAT"
870 DATA "PLANNED OUT OF HOUSE OBLIGATIONS"

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880 DATA "SUB TOTAL","MISC","TRAVEL","TOTAL LAB $","MIL D/L HRS"
890 DATA "CIV D/L HRS","ELEMENTS"
900 DATA " " PLANNED IN HOUSE EXPENDITURES"
910 DATA "1st QTR","2nd QTR","3rd QTR","4th QTR"," TOTAL"
920 DATA "1st QTR"," C/F"," TOTAL"," "
930 IF G2=1 THEN 9060
940 MOVE @N:5,80
950 PRINT @N:"COST CENTER:";B$
960 MOVE @N:5,6
970 PRINT @N:0$,Y$,"REV NO ";N$
980 X=21.8
990 Y=73
1000 X1=0
1010 Y1=0
1020 MOVE @N:X,Y
1030 END
1040 X1=X1+1
1050 IF X1<>8 THEN 1070
1060 X1=0
1070 X=X1*13.75+21.8
1080 MOVE X,Y
1090 END
1100 IF X1=0 THEN 1130
1110 X1=X1-1
1120 GOTO 1070
1130 X1=7
1140 GOTO 1070
1150 Y1=Y1+1
1160 IF Y1<>13 THEN 1180
1170 Y1=0
1180 Y2=Y1*5
1190 Y=73-Y2
1200 MOVE X,Y
1210 END
1220 IF Y1=0 THEN 1250
1230 Y1=Y1-1
1240 GOTO 1180
1250 Y1=12
1260 GOTO 1180
1270 INPUT A$
1280 IF A$="" THEN 1400
1290 Y4=M(Y1+1,X1+1)
1300 Z$=SEG(A$,1,1)
1310 IF Z$<>"+" AND Z$<>"- " THEN 1340
1320 M(Y1+1,X1+1)=M(Y1+1,X1+1)+VAL(A$)
1330 GOTO 1350
1340 M(Y1+1,X1+1)=VAL(A$)
1350 IF Y1<>5 AND Y1<>12 THEN 1400
1360 Y5=M(Y1+1,X1+1)-Y4
1370 MOVE X,Y

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1380 RMOVE -2,-5
1390 PRINT Y5
1400 MOVE X,Y
1410 END
1420 RESTORE
1430 FOR J=1 TO 24
1440 READ A$
1450 NEXT J
1460 FOR J=1 TO 18
1470 X3=0
1480 READ F,V1,V2
1490 FOR K=V1 TO V2
1500 X3=M(F,K)+X3
1510 NEXT K
1520 M(F,V2+1)=X3
1530 NEXT J
1540 FOR J=1 TO 8
1550 M(3,J)=INT(M(1,J)*D6+.5000001)+INT(M(2,J)*D7+.5)
1560 NEXT J
1570 FOR J=1 TO 16
1580 X3=0
1590 READ F,V1,V2
1600 FOR K=V1 TO V2
1610 X3=X3+M(K,F)
1620 NEXT K
1630 M(V2+1,F)=X3
1640 NEXT J
1650 DATA 1,1,4,2,1,4,3,1,4,4,1,4,5,1,4,8,1,4,9,1,4,10,1,4,11,1,4
1660 DATA 1,5,7,2,5,7,3,5,7,4,5,7,5,5,7,8,5,7,9,5,7,10,5,7,11,5,7
1670 DATA 1,3,5,2,3,5,3,3,5,4,3,5,5,3,5,6,3,5,7,3,5,8,3,5
1680 DATA 1,8,11,2,8,11,3,8,11,4,8,11,5,8,11,6,8,11,7,8,11,8,8,11
1690 FOR J=1 TO 8
1700 M(13,J)=M(6,J)+M(12,J)
1710 NEXT J
1720 END
1730 FOR K=1 TO 8
1740 FOR J=1 TO 13
1750 IF J=7 THEN 1780
1760 MOVE 13.75*K+6.25,76-5*J
1770 PRINT USING 180:M(J,K)
1780 NEXT J
1790 NEXT K
1800 MOVE 21.8,73
1810 END
1820 PAGE
1830 PRI " **** REVISIONS ****"
1840 Z7=1
1850 RUN 1910
1860 INIT
1870 Z7=0
1880 DIM M(13,8)

```

```

1890 M=0
1900 PAGE
1910 PRI " ##### WORK EXECUTION DOCUMENT PROGRAM #####
1920 PRI " ##### DATA STORAGE #####
1930 PRINT "JJJTHIS PROGRAM IS DESIGNED TO STORE THE"
1940 PRINT "JWORK EXECUTION DOCUMENT DATA FOR A PARTICULAR COST CENTER."
1950 PRINT "JJJINPUT THE FOLLOWING AS SPECIFIED. IF YOU ARE REVISING "
1960 PRINT "A PREVIOUS FILE AND YOU WISH NOT TO CHANGE THE DATA "
1970 PRINT "STATEMENT, ENTER ^, PRESS RETURN AND THAT LINE WILL STAY "
1980 PRINT "AS IT WAS ON FILE. IF YOU WISH TO CHANGE THE LINE THEN "
1990 PRINT "ENTER THE NEW LINE AND PRESS RETURN "
2000 PRINT "JJGGPRESS RETURN TO CONTINUE: ";
2010 INPUT Z$
2020 IF Z7=0 THEN 2250
2030 PAGE
2040 PRINT "TO CC: ";B$," DATE: ";D$,"RESP PERSON: ";C$
2050 PRINT Y$
2060 PRINT "JFROM CC: ";E$," DATE: ";G$,"INITIATOR: ";F$
2070 PRINT "JAPPROVED: ";H$," DATE: ";I$
2080 PRINT "J(1)WORK ORDER/(2)JOB ORDER ";D5
2090 PRINT "JPLAN START DATE ";L$,"PLAN END DATE ";M$
2100 PRINT "JREV NO ";N$
2110 PRINT "JORDER NO ";O$
2120 PRINT "JSO EXP DATE ";P$," SOC CC ";R$
2130 PRINT "JTITLE: ";S$
2140 PRINT " " ;U$
2150 PRINT "JINT MGT CODE ";T$," TYPE ORDER(1)SBR/(2)FP/(3)EXEMPT ";D0
2160 PRINT "JFUNDS"
2170 PRINT "PRIOR ";D1,"INCREASE ";D2
2180 PRINT "DECREASE ";D3,"CURRENT ";D4
2190 PRINT "JDESCRIPTION OF WORK TO BE PERFORMED:"
2200 PRINT W$
2210 PRINT V$
2220 PRINT X$
2230 PRINT "JPRESS RETURN TO CONTINUE";
2240 INPUT Z$
2250 PAGE
2260 PRINT "TO CC:";
2270 INPUT Z$
2280 IF Z$<>"" THEN 2300
2290 Z$=" "
2300 IF Z$<>"" THEN 2330
2310 PRINT "K ";B$
2320 GOTO 2340
2330 B$=Z$
2340 PRINT "K DATE:";
2350 INPUT Z$
2360 IF Z$<>"" THEN 2380
2370 Z$=" "
2380 IF Z$<>"" THEN 2410
2390 PRINT "K ";D$

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2400 GOTO 2420
2410 D$=Z$
2420 PRINT "RESP PERSON: ";
2430 INPUT Z$
2440 IF Z$<>"" THEN 2460
2450 Z$=" "
2460 IF Z$<>"" THEN 2490
2470 PRINT "X           ";C$
2480 GOTO 2500
2490 C$=Z$
2500 PRINT "ENTER NON-ABBREVIATED NAME OF COST CENTER: ";
2510 INPUT Z$
2520 IF Z$<>"" THEN 2540
2530 Z$=" "
2540 IF Z$<>"" THEN 2570
2550 PRINT "X           ";Y$
2560 GOTO 2610
2570 IF LEN(Z$)<=31 THEN 2600
2580 PRINT "HAS TO MANY LETTERS "
2590 GOTO 2500
2600 Y$=Z$
2610 PRINT "FROM CC: ";
2620 INPUT Z$
2630 IF Z$<>"" THEN 2650
2640 Z$=" "
2650 IF Z$<>"" THEN 2680
2660 PRINT "X           ";E$
2670 GOTO 2690
2680 E$=Z$
2690 PRINT "X           DATE: ";
2700 INPUT Z$
2710 IF Z$<>"" THEN 2730
2720 Z$=" "
2730 IF Z$<>"" THEN 2760
2740 PRINT "X           ";G$
2750 GOTO 2770
2760 G$=Z$
2770 PRINT "INITIATOR: ";
2780 INPUT Z$
2790 IF Z$<>"" THEN 2810
2800 Z$=" "
2810 IF Z$<>"" THEN 2840
2820 PRINT "X           ";F$
2830 GOTO 2850
2840 F$=Z$
2850 PRINT "APPROVED: ";
2860 INPUT Z$
2870 IF Z$<>"" THEN 2890
2880 Z$=" "
2890 IF Z$<>"" THEN 2920

```

```

2900 PRINT "K           ";H$
2910 GOTO 2930
2920 H$=Z$
2930 PRINT "DATE:";
2940 INPUT Z$
2950 IF Z$<>"" THEN 2970
2960 Z$=" "
2970 IF Z$<>"" THEN 3000
2980 PRINT "K           ";I$
2990 GOTO 3010
3000 I$=Z$
3010 PRINT "JJJENTER 1 OR 2 :(1)WORK ORDER ,(2)JOB ORDER ";
3020 INPUT Z$
3030 IF Z$<>"" THEN 3050
3040 Z$="0"
3050 IF Z$<>"" THEN 3080
3060 PRINT "K           ";D5
3070 GOTO 3090
3080 D5=VAL(Z$)
3090 PRINT "JPLAN START DATE:";
3100 INPUT Z$
3110 IF Z$<>"" THEN 3130
3120 Z$=" "
3130 IF Z$<>"" THEN 3160
3140 PRINT "K           ";L$
3150 GOTO 3170
3160 L$=Z$
3170 PRINT "JPLAN END DATE:";
3180 INPUT Z$
3190 IF Z$<>"" THEN 3210
3200 Z$=" "
3210 IF Z$<>"" THEN 3240
3220 PRINT "K           ";M$
3230 GOTO 3250
3240 M$=Z$
3250 PRINT "JREV NO:";
3260 INPUT Z$
3270 IF Z$<>"" THEN 3290
3280 Z$=" "
3290 IF Z$<>"" THEN 3320
3300 PRINT "K           ";N$
3310 GOTO 3330
3320 N$=Z$
3330 PRINT "JJJORDER NO:";
3340 INPUT Z$
3350 IF Z$<>"" THEN 3370
3360 Z$=" "
3370 IF Z$<>"" THEN 3400
3380 PRINT "K           ";O$
3390 GOTO 3410
3400 O$=Z$

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```
3410 PRINT "JS O EXP DATE:";  
3420 INPUT Z$  
3430 IF Z$<>"" THEN 3450  
3440 Z$=" "  
3450 IF Z$<>"" THEN 3480  
3460 PRINT "K ";P$  
3470 GOTO 3490  
3480 P$=Z$  
3490 PRINT "JSOH CC:";  
3500 INPUT Z$  
3510 IF Z$<>"" THEN 3530  
3520 Z$=" "  
3530 IF Z$<>"" THEN 3580  
3540 PRINT "K ";R$  
3550 PRINT "JJ*****PRESS RETURN TO CONTINUE*****GG";  
3560 INPUT Z$  
3570 GOTO 3590  
3580 R$=Z$  
3590 PAGE  
3600 PRINT "J(2 LINES)TITLE:"  
3610 PRINT "LINE 1:";  
3620 INPUT Z$  
3630 IF Z$<>"" THEN 3650  
3640 Z$=" "  
3650 IF Z$<>"" THEN 3680  
3660 PRINT "K ";S$  
3670 GOTO 3690  
3680 S$=Z$  
3690 IF LEN(S$)<=30 THEN 3720  
3700 PRINT "LINE HAS TO MANY LETTERS(MAX 30)"  
3710 GOTO 3600  
3720 PRINT "LINE 2:";  
3730 INPUT Z$  
3740 IF Z$<>"" THEN 3760  
3750 Z$=" "  
3760 IF Z$<>"" THEN 3790  
3770 PRINT "K ";U$  
3780 GOTO 3800  
3790 U$=Z$  
3800 IF LEN(U$)<=29 THEN 3830  
3810 PRINT "LINE 2 HAS TO MANY LETTERS (MAX29)"  
3820 GOTO 3720  
3830 PRINT "JINT MGT CODE:";  
3840 INPUT Z$  
3850 IF Z$<>"" THEN 3870  
3860 Z$=" "  
3870 IF Z$<>"" THEN 3900  
3880 PRINT "K ";T$  
3890 GOTO 3910  
3900 T$=Z$
```

```

3910 PRINT "JJJTYPE ORDER: 1-SBR 2-FP 3-EXEMPT ENTER 1,2, OR 3 :";
3920 INPUT Z$
3930 IF Z$<>"" THEN 3950
3940 Z$="0"
3950 IF Z$<>"^" THEN 3990
3960 PRINT "K" ;DO
3970 GOTO 4000
3980 PRINT "K" ;DO
3990 DO=VAL(Z$)
4000 PRINT "JJJFUND$"
4010 PRINT "PRIOR: ";
4020 INPUT Z$
4030 IF Z$<>"" THEN 4050
4040 Z$="0"
4050 IF Z$<>"^" THEN 4080
4060 PRINT "K" ;D1
4070 GOTO 4090
4080 D1=VAL(Z$)
4090 PRINT "INCREASE: ";
4100 INPUT Z$
4110 IF Z$<>"" THEN 4130
4120 Z$="0"
4130 IF Z$<>"^" THEN 4160
4140 PRINT "K" ;D2
4150 GOTO 4170
4160 D2=VAL(Z$)
4170 PRINT "DECREASE: ";
4180 INPUT Z$
4190 IF Z$<>"" THEN 4210
4200 Z$="0"
4210 IF Z$<>"^" THEN 4240
4220 PRINT "K" ;D3
4230 GOTO 4250
4240 D3=VAL(Z$)
4250 D4=D1+D2-D3
4260 PRINT "CURRENT: ;D4
4270 PRINT "JJJDESCRIPTION OF WORK TO BE DONE: "
4280 PRINT " 3 LINES MAX-72 CHARACTERS PER LINE"
4290 INPUT Z$
4300 IF Z$<>"" THEN 4320
4310 Z$=" "
4320 IF Z$<>"^" THEN 4350
4330 PRINT W$
4340 GOTO 4360
4350 W$=Z$
4360 INPUT Z$
4370 IF Z$<>"" THEN 4390
4380 Z$=" "
4390 IF Z$<>"^" THEN 4420
4400 PRINT V$
4410 GOTO 4430

```

```

4420 V$=Z$
4430 INPUT Z$
4440 IF Z$<>"" THEN 4460
4450 Z$=" "
4460 IF Z$<>"" THEN 4490
4470 PRINT X$
4480 GOTO 4500
4490 X$=Z$
4500 PRINT "CURRENT FY";
4510 INPUT Z$
4520 IF Z$<>"" THEN 4540
4530 Z$=" "
4540 IF Z$<>"" THEN 4570
4550 PRINT "K           ";J$
4560 GOTO 4580
4570 J$=Z$
4580 PRINT "BFY";
4590 INPUT Z$
4600 IF Z$<>"" THEN 4620
4610 Z$=" "
4620 IF Z$<>"" THEN 4650
4630 PRINT "K           ";K$
4640 GOTO 4660
4650 K$=Z$
4660 PRINT "ENTER CIV D/L RATE ($/HR)";
4670 INPUT Z$
4680 IF Z$<>"" THEN 4700
4690 Z$="0"
4700 IF Z$<>"" THEN 4730
4710 PRINT "K           ";D6
4720 GOTO 4740
4730 D6=VAL(Z$)
4740 PRINT "ENTER MIL D/L RATE ($/HR)";
4750 INPUT Z$
4760 IF Z$<>"" THEN 4780
4770 Z$="0"
4780 IF Z$<>"" THEN 4810
4790 PRINT "K           ";D7
4800 GOTO 4820
4810 D7=VAL(Z$)
4820 GOTO 570
4830 PAGE
4840 PRINT "IS THIS DATA A REVISION (Y OR N):";
4850 INPUT Z$
4860 IF Z$="N" THEN 4920
4870 N$=STR(VAL(N$)+1)
4880 N$="0"&OON$
4890 N$=REP("",2,1)
4900 FIND NO
4910 GOTO 5000
4920 FIND 3

```

```
4930 READ @33:X0
4940 X0=X0+1
4950 FIND 3
4960 WRITE @33:X0
4970 FIND X0+3
4980 MARK 1,1792
4990 FIND X0+3
5000 WRITE @33:0$,B$,Y$,D5,N$,M
5010 WRITE @33:C$,D$,E$,F$,G$,H$
5020 WRITE @33:I$,J$,K$,L$,M$
5030 WRITE @33:P$,R$,S$,T$,U$,V$
5040 WRITE @33:W$,X$,D0,D1,D2,D3
5050 WRITE @33:D4,D6,D7
5060 PRINT "DONEG"
5070 END
5080 WINDOW 0,150,0,130
5090 VIEWPORT 0,150,0,130
5100 N=10
5110 PRINT @N,17:1.792*.6,2.816*.6
5120 MOVE @N:0,0
5130 DRAW @N:0,75
5140 DRAW @N:99,75
5150 DRAW @N:99,0
5160 DRAW @N:0,0
5170 MOVE @N:3,0
5180 DRAW @N:3,75
5190 MOVE @N:37,75
5200 DRAW @N:37,70
5210 MOVE @N:71,70
5220 DRAW @N:71,75
5230 MOVE @N:71,55.5
5240 DRAW @N:71,66
5250 DRAW @N:99,66
5260 MOVE @N:3,70
5270 DRAW @N:99,70
5280 MOVE @N:99,55.5
5290 DRAW @N:0,55.5
5300 MOVE @N:0,47.5
5310 DRAW @N:99,47.5
5320 MOVE @N:99,45.5
5330 DRAW @N:0,45.5
5340 RESTORE
5350 MOVE @N:0,3.25
5360 DRAW @N:99,3.25
5370 FOR J=6.5 TO 16.25 STEP 3.25
5380 MOVE @N:3,J
5390 DRAW @N:99,J
5400 NEXT J
5410 MOVE @N:0,19.5
5420 DRAW @N:99,19.5
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5430 MOVE @N:99,21.5
5440 DRAW @N:0,21.5
5450 MOVE @N:3,24.75
5460 DRAW @N:99,24.75
5470 FOR J=28 TO 41 STEP 3.25
5480 MOVE @N:3,J
5490 DRAW @N:99,J
5500 NEXT J
5510 MOVE @N:15.55,66.55
5520 DRAW @N:17.55,66.55
5530 DRAW @N:17.55,68.55
5540 DRAW @N:15.55,68.55
5550 DRAW @N:15.55,66.55
5560 MOVE @N:31,66.55
5570 DRAW @N:33,66.55
5580 DRAW @N:33,68.55
5590 DRAW @N:31,68.55
5600 DRAW @N:31,66.55
5610 MOVE @N:53,66.55
5620 DRAW @N:59.5,66.55
5630 MOVE @N:77.15,66.55
5640 DRAW @N:83.65,66.55
5650 MOVE @N:93.8,66.55
5660 DRAW @N:98,66.55
5670 MOVE @N:13.4,63.05
5680 DRAW @N:26,63.05
5690 MOVE @N:41.8,63.05
5700 DRAW @N:48.4,63.05
5710 MOVE @N:60.65,63.05
5720 DRAW @N:67.2,63.05
5730 MOVE @N:60.85,59.55
5740 DRAW @N:67.2,59.55
5750 MOVE @N:44.5,56.5
5760 DRAW @N:46.5,56.5
5770 DRAW @N:46.5,58.5
5780 DRAW @N:44.5,58.5
5790 DRAW @N:44.5,56.5
5800 MOVE @N:52.2,56.5
5810 DRAW @N:54.2,56.5
5820 DRAW @N:54.2,58.5
5830 DRAW @N:52.2,58.5
5840 DRAW @N:52.2,56.5
5850 MOVE @N:58.75,56.5
5860 DRAW @N:60.75,56.5
5870 DRAW @N:60.75,58.5
5880 DRAW @N:58.75,58.5
5890 DRAW @N:58.75,56.5
5900 MOVE @N:81.6,62
5910 DRAW @N:98,62

5920 MOVE @N:81.6,60
5930 DRAW @N:98,60
5940 MOVE @N:81.6,58
5950 DRAW @N:98,58
5960 MOVE @N:81.6,56
5970 DRAW @N:98,56
5980 MOVE @N:82,64.3
5990 DRAW @N:87,64.3
6000 FOR J=19 TO 89 STEP 10
6010 IF J<>29 AND J<>39 AND J<>49 THEN 6040
6020 MOVE @N:J,43.25
6030 GOTO 6050
6040 MOVE @N:J,45.5
6050 DRAW @N:J,21.5
6060 MOVE @N:J,19.5
6070 DRAW @N:J,0
6080 NEXT J
6090 IF D5=2 THEN 6130
6100 MOVE @N:15.55,66.55
6110 GOSUB 6250
6120 GOTO 6150
6130 MOVE @N:31,66.55
6140 GOSUB 6250
6150 GOSUB D0 OF 6160,6190,6220
6160 MOVE @N:44.5,56.5
6170 GOSUB 6250
6180 GOTO 6290
6190 MOVE @N:52.2,56.5
6200 GOSUB 6250
6210 GOTO 6290
6220 MOVE @N:58.75,56.5
6230 GOSUB 6250
6240 GOTO 6290
6250 RDRAW @N:2,2
6260 RMOVE @N:-2,0
6270 RDRAW @N:2,-2
6280 RETURN
6290 PAGE
6300 MOVE @N:4,73
6310 PRINT @N:"TO CC:";B\$
6320 MOVE @N:4,71
6330 PRINT @N:"RESP PERSON:";C\$
6340 MOVE @N:25,73
6350 PRINT @N:"DATE:";D\$
6360 MOVE @N:38,73
6370 PRINT @N:"FROM CC:";E\$
6380 MOVE @N:38,71
6390 PRINT @N:"INITIATOR:";F\$
6400 MOVE @N:59,73
6410 PRINT @N:"DATE:";G\$
6420 MOVE @N:72,73

6430 PRINT @N:"APPROVED:";H\$
6440 MOVE @N:72,71
6450 PRINT @N:"DATE:";I\$
6460 MOVE @N:4,67
6470 PRINT @N:"WORK ORDER"
6480 MOVE @N:20.55,67
6490 PRINT @N:"JOB ORDER"
6500 MOVE @N:36,67
6510 PRINT @N:"PLAN START DATE ";L\$
6520 MOVE @N:62.5,67
6530 PRINT @N:"PLAN END DATE ";M\$
6540 MOVE @N:86.64999,67
6550 PRINT @N:"REV NO ";N\$
6560 MOVE @N:4,63.5
6570 PRINT @N:"ORDER NO ";O\$
6580 MOVE @N:4,60
6590 PRINT @N:"TITLE:";S\$
6600 MOVE @N:10.5,58.3
6610 PRINT @N:U\$
6620 MOVE @N:27.2,63.5
6630 PRINT @N:"S O EXP DATE: ";P\$
6640 MOVE @N:53.4,63.5
6650 PRINT @N:"SOH CC ";R\$
6660 MOVE @N:47,60
6670 PRINT @N:"INT MGT CODE ";T\$
6680 MOVE @N:31,56.5
6690 PRINT @N:"TYPE ORDER: SBP FP EXEMPT"
6700 MOVE @N:82,64.8
6710 PRINT @N:"FUNDS"
6720 MOVE @N:72,62.5
6730 PRINT @N:"PRIOR ";D1
6740 MOVE @N:72,60.5
6750 PRINT @N:"INCREASE ";D2
6760 MOVE @N:72,58.5
6770 PRINT @N:"DECREASE ";D3
6780 MOVE @N:72,56.5
6790 PRINT @N:"CURRENT ";D4
6800 MOVE @N:1,63
6810 PRINT @N:"A"
6820 MOVE @N:1,51
6830 PRINT @N:"B"
6840 MOVE @N:1,33
6850 PRINT @N:"C"
6860 MOVE @N:1,10.5
6870 PRINT @N:"D"
6880 MOVE @N:1,.9
6890 PRINT @N:"E"
6900 MOVE @N:4,54.2
6910 PRINT @N:"DESCRIPTION OF WORK TO BE PERFORMED:"
6920 MOVE @N:10,52.2
6930 PRINT @N:W\$

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APPENDIX C
FORM 231, WORK EXECUTION DOCUMENTS

```
3110 PRINT @N:"Travel- ";B$;" : "
3120 B=13.4
3130 GOSUB 3540
3140 PRINT @N: USING 3600:INT(M(4,8)/100+.5)/10
3150 NEXT R1
3160 NEXT L
3170 PAGE
3180 PRI "GG*****"
3190 PRI "G***** SUM PRINT *****G"
3200 PRI "GG*****"
3210 PRI "GG*****"
3220 PRI "GG***** REPLACE ON THE PLOTTER PAGE ONE OF THE SOMP *****"
3230 PRI "GG*****"
3240 N4=1
3250 GOTO 1000
3260 FOR J=1 TO 7
3270 A=25.2+55.2/33*30
3280 B=17.63+J*8
3290 IF J<>7 THEN 3310
3300 J=8
3310 GOSUB 3540
3320 PRINT @N: USING 3590:H1(J)
3330 A=A+55.2/33*2
3340 GOSUB 3540
3350 PRINT @N: USING 3600:INT(S1(J)/100+.5)/10
3360 A=A+55.2/33*12
3370 GOSUB 3540
3380 PRINT @N: USING 3600:INT(E1(J)/100+.5)/10
3390 A=A+55.2/33*2
3400 GOSUB 3540
3410 PRINT @N: USING 3600:INT((S1(J)+E1(J))/100+.5)/10
3420 NEXT J
3430 IF N5<10 THEN 3460
3440 A=125
3450 GOTO 3470
3460 A=25.2+55.2/33*(R2+51)
3470 B=8
3480 GOSUB 3540
3490 PRINT @N:"TOTAL :"
3500 B=13.4
3510 GOSUB 3540
3520 PRINT @N: USING 3600:INT(T1/100+.5)/10
3530 END
3540 REM SUB
3550 X=A*COS(T)-B*SIN(T)
3560 Y=B*COS(T)+A*SIN(T)
3570 MOVE @N:X+X1,Y+Y1
3580 RETURN
3590 IMAGE 7D
3600 IMAGE 5D.1D
```

```
2600 B=17.63+F*8
2610 IF F<>7 THEN 2630
2620 F=8
2630 E1(F)=M(9,F)+E1(F)
2640 IF M(9,F)=0 THEN 2670
2650 GOSUB 3540
2660 PRINT @N: USING 3600:INT(M(9,F)/100+.5)/10
2670 NEXT F
2680 IF N6<=F0+3 THEN 2940
2690 N7=N7+1
2700 IF N7>F0+3 THEN 2950
2710 IF F1(N7)=0 THEN 2690
2720 FOR R=1 TO F0+3
2730 IF F1(N7)=F9(R) THEN 2750
2740 NEXT R
2750 FIND R
2760 READ @33:A$,B$,Y$,D5,N$,M
2770 IF M(10,8)=0 THEN 2690
2780 A=25.2+55.2/33*(R1+35)
2790 B=3
2800 GOSUB 3540
2810 PRINT @N:"OGA ";Y$
2820 B=21.4
2830 GOSUB 3540
2840 PRINT @N:B$
2850 FOR F=1 TO 7
2860 B=17.63+F*8
2870 IF F<>7 THEN 2890
2880 F=8
2890 E1(F)=M(10,F)+E1(F)
2900 IF M(10,F)=0 THEN 2930
2910 GOSUB 3540
2920 PRINT @N: USING 3600:INT(M(10,F)/100+.5)/10
2930 NEXT F
2940 NEXT R1
2950 FOR R1=0 TO 9
2960 N3=N3+1
2970 IF N3>F0+3 THEN 3160
2980 IF F1(N3)=0 THEN 2960
2990 FOR R=1 TO F0+3
3000 IF F1(N3)=F9(R) THEN 3020
3010 NEXT R
3020 FIND R
3030 READ @33:A$,B$,Y$,D5,N$,M
3040 IF M(4,8)=0 THEN 2960
3050 N5=N5+1
3060 A=25.2+55.2/33*(R1+49)
3070 R2=R1
3080 B=5
3090 T1=T1+M(4,8)
3100 GOSUB 3540
```

```
2090 GOSUB 3540
2100 PRINT @N: USING 3590:M(1,I)
2110 A=A+55.2/33*2
2120 GOSUB 3540
2130 PRINT @N: USING 3600:D1(I)
2140 NEXT I
2150 NEXT H
2160 FOR R1=0 TO 8
2170 N2=N2+1
2180 IF N2>F0+3 THEN 2430
2190 IF F1(N2)=0 THEN 2170
2200 FOR R=1 TO F0+3
2210 IF F1(N2)=F9(R) THEN 2230
2220 NEXT R
2230 FIND R
2240 READ @33:A$,B$,Y$,D5,N$,M
2250 IF M(8,8)=0 THEN 2170
2260 A=25.2+55.2/33*(R1+35)
2270 B=3
2280 GOSUB 3540
2290 PRINT @N:"MATERIAL"
2300 B=21.4
2310 GOSUB 3540
2320 PRINT @N:B$
2330 FOR F=1 TO 7
2340 B=17.63+F*8
2350 IF F<>7 THEN 2370
2360 F=8
2370 E1(F)=M(8,F)+E1(F)
2380 IF M(8,F)=0 THEN 2410
2390 GOSUB 3540
2400 PRINT @N: USING 3600:INT(M(8,F)/100+.5)/10
2410 NEXT F
2420 IF N2<=F0+3 THEN 2940
2430 N6=N6+1
2440 IF N6>F0+3 THEN 2680
2450 IF F1(N6)=0 THEN 2430
2460 FOR R=1 TO F0+3
2470 IF F1(N6)=F9(R) THEN 2490
2480 NEXT R
2490 FIND R
2500 READ @33:A$,B$,Y$,D5,N$,M
2510 IF M(9,8)=0 THEN 2430
2520 A=25.2+55.2/33*(R1+35)
2530 B=3
2540 GOSUB 3540
2550 PRINT @N:"CONTRACT ";Y$
2560 B=21.4
2570 GOSUB 3540
2580 PRINT @N:B$
2590 FOR F=1 TO 7
```

```
1580 PRINT @N:L
1590 B=79.45
1600 GOSUB 3540
1610 PRINT @N:P8
1620 A=3.25
1630 B=10.9
1640 GOSUB 3540
1650 PRINT @N:P$
1660 B=51.2
1670 GOSUB 3540
1680 PRINT @N:Q$
1690 A=6.6
1700 B=15.85
1710 GOSUB 3540
1720 PRINT @N:R$
1730 B=51.05
1740 GOSUB 3540
1750 PRINT @N:S$
1760 B=68.15
1770 GOSUB 3540
1780 PRINT @N:T$
1790 FOR H=0 TO 9
1800 N1=N1+1
1810 IF N1>F0+3 THEN 2160
1820 IF F1(N1)=0 THEN 1800
1830 Z$=STR(F1(N1))
1840 U$=SEG(Z$,4,3)
1850 IF U$="#701" THEN 1800
1860 IF F1(N1)<1000 THEN 1800
1870 FOR G=1 TO F0+3
1880 IF F1(N1)=F9(G) THEN 1910
1890 NEXT G
1900 PRINT "ERROR"
1910 FIND G
1920 READ @33:A$,B$,Y$,D5,N$,M
1930 A=25.2+55.2/33*(3*H+2)
1940 B=21.4
1950 GOSUB 3540
1960 PRINT @N:B$
1970 FOR I=1 TO 8
1980 D1(I)=INT(M(6,I)/100+.5)/10
1990 S1(I)=M(6,I)+S1(I)
2000 H1(I)=M(1,I)+H1(I)
2010 NEXT I
2020 REM PRINT
2030 FOR I=1 TO 7
2040 A=25.2+55.2/33*3*H
2050 B=17.63+I*8
2060 IF I<>7 THEN 2080
2070 I=8
2080 IF M(1,I)=0 AND D1(I)=0 THEN 2140
```

```

1070 PRI "GGG***** PRESS RETURN ****"
1080 INPUT Z$
1090 PRI "J-----"
1100 MOVE @N:0,10
1110 PRI "J(4) MOVE THE PEN THRU THE USE OF THE JOY-STICK TO THE LOWER"
1120 PRINT " LEFT HAND CORNER OF THE SOMP FORM (NOT THE LOWER LEFT"
1130 PRINT " CORNER OF THE PAPER, BUT THE CORNER OF THE RECTANGLE "
1140 PRINT " ENCLOSING THE LETTER A!) --THEN PRESS RETURN ";
1150 INPUT Z$
1160 GIN @10:X1,Y1
1170 RMOVE @N:140,0
1180 PRINT "J(5) NOW MOVE THE PEN TO THE LOWER RIGHT CORNER OF THE SOMP"
1190 PRINT " FORM THEN PRESS RETURN ";
1200 INPUT Z$
1210 GIN @10:X2,Y2
1220 MOVE @N:-130,90
1230 PRI "J(6) MOVE THE PEN TO THE UPPER LEFT CORNER OF THE SOMP FORM "
1240 PRINT " AND PRESS RETURN";
1250 INPUT Z$
1260 GIN @10:X3,Y3
1270 SET DEGREES
1280 M1=(Y2-Y1)/(X2-X1)
1290 T=ATN(M1)
1300 PRINT @10,25:90+T
1310 IF X3-X1<>0 THEN 1330
1320 X3=X3+9.999999E-06
1330 M2=(Y3-Y1)/(X3-X1)
1340 T2=ATN(M2)
1350 PRINT "THE ANGLE MADE BY THE THREE POINTS YOU HAVE LOCATED "
1360 PRINT "SHOULD BE EQUAL TO 90 DEG."
1370 PRINT "YOUR ANGLE IS EQUAL TO ";ABS(T)+ABS(T2)
1380 IF ABS(ABS(T)+ABS(T2)-90)>.75 THEN 960
1390 PRINT "CLOSE ENOUGH"
1400 IF N4=1 THEN 3260
1410 REM PRINT ROUTINE
1420 PRINT @N,17:1.792*.45,2.816*.45
1430 A=1.5
1440 B=12
1450 GOSUB 3540
1460 PRINT @N:I$
1470 B=26
1480 GOSUB 3540
1490 PRINT @N:J$
1500 B=38.9
1510 GOSUB 3540
1520 PRINT @N:K$
1530 B=56.15
1540 GOSUB 3540
1550 PRINT @N:L$
1560 B=73.35
1570 GOSUB 3540

```

```

560 FOR J=4 TO 3+F0
570 FIND J
580 READ #33:A$
590 Z$=SEG(A$,1,4)
600 IF Z$<>I$ THEN 670
610 U$=SEG(A$,6,2)
620 V$=SEG(A$,9,3)
630 W$=U$&OOV$
640 F1(J)=VAL(W$)
650 IF F1(J)>100 OR U$="00" THEN 670
660 F1(J)=F1(J)*1000
670 NEXT J
680 F9=F1
690 REM SORT
700 FOR K=1 TO F0+3
710 FOR J=1 TO F0+3
720 F3=F1(J)
730 IF F1(J)<F1(K) THEN 760
740 F1(J)=F1(K)
750 F1(K)=F3
760 NEXT J
770 NEXT K
780 REM DEL
790 FOR J=1 TO F0+3
800 IF F1(J)=0 THEN 930
810 U$=STR(F1(J))
820 V$=SEG(U$,4,3)
830 IF F1(J)<1000 THEN 930
840 IF V$<>"000" AND V$<>"00" THEN 910
850 FOR K=1 TO F0+3
860 IF K=J THEN 900
870 IF INT(F1(J)/1000)-INT(F1(K)/1000)<>0 THEN 900
880 F1(J)=0
890 GOTO 930
900 NEXT K
910 IF V$="701" THEN 930
920 P9=P9+1
930 NEXT J
940 P8=INT((P9+9)/10)
950 FOR L=1 TO P8
960 PAGE
970 PRINT "*****"
980 PRI "*****";"PAGE ";L;"*****"
990 PRINT "*****"
1000 PRINT "JGPLACE SOMP FORM ON THE PLOTTER MEETING THE FOLLOWING:"
1010 PRINT "(1) SOMP MUST BE PLACED LONGWAYS ON THE PLOTTER"
1020 PRI "(2) THE OUTER EDGE OF THE SOMP FORM (THE EDGE CLOSEST TO THE"
1030 PRINT "    TOTAL COLUMN) MUST BE PLACED AT THE TOP EDGE OF THE"
1040 PRINT "    PLOTTER APPROXIMATELY 1 TO 3 INCHES FROM THE TOP"
1050 PRINT "(3) THE LEFT EDGE OF THE SOMP FORM MUST BE PLACED TO THE"
1060 PRI "    EDGE OF THE HOLES LOCATED AT THE LEFT END OF THE PLOTTER"

```

```
1 REM SALES ORDER MASTER PLAN PROGRAM --JUNE 1983-- TEKTRONIX VERSION
2 REM EDWARD F DOYLE III AND R ANDREW BLANKENBILLER -- (301) 671-2494
4 RUN 100
8 RUN 380
12 RUN 960
100 PAGE
110 INIT
120 N=10
130 PRINT "*****"
140 PRINT "*****"
150 PRINT "***** SALES ORDER MASTER PLAN *****"
160 PRINT "***** WORK FORM *****"
170 PRINT "*****"
180 PRINT "*****"
190 PRINT "ENTER THE FOLLOWING:J"
200 PRINT "IDN/SO NO. ";
210 INPUT I$
220 PRINT "REV NO. ";
230 INPUT J$
240 PRINT "REV DATE ";
250 INPUT K$
260 PRINT "AMCCMS NO. ";
270 INPUT L$
280 PRINT "PROJ NO. ";
290 INPUT P$
300 PRINT "PROJECTILE PLAN FOR ";
310 INPUT Q$
320 PRINT "CUSTOMER ";
330 INPUT R$
340 PRINT "S.O. CCN ";
350 INPUT S$
360 PRINT "TYPE ";
370 INPUT T$
380 PRINT "JJJJGGLOAD WORK EXECUTION DOCUMENT TAPE AND PRESS RETURN ";
390 INPUT Z$
400 FIND 3
410 READ @33:F0
420 DIM F1(F0+3),S1(8),F9(F0+3),M(13,8),D1(8),E1(8),H1(8)
430 F1=0
440 P9=0
450 N1=0
460 S1=0
470 E1=0
480 T1=0
490 H1=0
500 N2=0
510 N3=0
520 N4=0
530 N5=0
540 N6=0
550 N7=0
```

```
8980 INPUT Q$  
8990 RESTORE  
9000 PAGE  
9010 IF N=32 THEN 610  
9020 WINDOW 0,200,0,120  
9030 VIEWPORT 0,150,0,100  
9040 PAGE  
9050 GOTO 630  
9060 FOR K=1 TO 8  
9070 FOR J=1 TO 13  
9080 IF S(J,K)=0 THEN 9130  
9090 IF J=7 THEN 9130  
9100 MOVE @N:13.75*K+6.25,76-5*J  
9110 PRINT @N: USING 9120:S(J,K)  
9120 IMAGE7D  
9130 NEXT J  
9140 NEXT K  
9150 MOVE @N:5,6  
9160 PRINT @N:Q$
```

```

8470 PRINT "CC: ";Q$,"JOB ORDER SUM"
8480 GOTO 8500
8490 PRINT "SO# ";Q$,"JOB ORDER SUM"
8500 PRINT "JJJ";"SO#","CC","
8510 FOR L=4 TO 3+X0
8520 FIND L
8530 READ @33:O$,B$,Y$,D5
8540 IF Z4=2 THEN 8570
8550 IF Q$<>B$ OR D5<>2 THEN 8670
8560 GOTO 8590
8570 Z$=SEG(O$,1,7)
8580 IF Q$<>Z$ OR D5<>2 THEN 8670
8590 READ @33:N$,M
8600 FOR K=1 TO 8
8610 FOR J=1 TO 13
8620 S(J,K)=S(J,K)+M(J,K)
8630 NEXT J
8640 NEXT K
8650 PRINT O$,B$;" ";Y$
8660 PRINT USING 160:"K";M(13,8)
8670 NEXT L
8680 PRINT "JJTOTAL JOB ORDER $ UNDER :";Q$;" $";S(13,8)
8690 M=S
8700 END
8710 PAGE
8720 PRINT "***** OUTPUT SUBROUTINE *****"
8730 PRINT "***** S/O# *****"
8740 PRINT
8750 PRINT "JJENTER S/O# (EXAMPLE 7947-10-001) ";
8760 INPUT Z$
8770 REM OUTPUT OF A SO #
8780 FIND 3
8790 READ @33:X0
8800 FOR J=4 TO 3+X0
8810 FIND J
8820 READ @33:O$
8830 IF O$<>Z$ THEN 8860
8840 NO=J
8850 GOTO 8870
8860 NEXT J
8870 FIND NO
8880 GOTO 500
8890 END
8900 PAGE
8910 G2=1
8920 PRINT "***** SUM PRINT *****"
8930 PRINT "***** SCREEN OR PLOTTER *****"
8940 PRINT "JENTER 32-SCREEN 10-PLOTTER";
8950 INPUT N
8960 PRINT @N,17:1.792*.75,2.816*.75
8970 PRINT "ENTER TITLE OF OUTPUT ";

```

```

7960 NEXT L
7970 PRINT "JJTOTAL JOB ORDER $: ";S(13,8)
7980 M=S
7990 END
8000 PAGE
8010 PRINT "      ***** SUM CC: WO *****"
8020 DIM S(13,8)
8030 DIM M(13,8)
8040 PRINT "JJJENTER COST CENTER (EX PJ3) ";
8050 INPUT Q$
8060 S=0
8070 FIND 3
8080 READ E33:X0
8090 PAGE
8100 PRINT "CC: ";Q$,"WORK ORDER SUM"
8110 PRINT "JJJ";"S0#","CC",""           GRAND TOTAL";"J"
8120 FOR L=4 TO 3+X0
8130 FIND L
8140 READ E33:O$,B$,Y$,D5
8150 IF Q$<>B$ OR D5<>1 THEN 8240
8160 READ E33:N$,M
8170 FOR K=1 TO 8
8180 FOR J=1 TO 13
8190 S(J,K)=S(J,K)+INT(M(J,K))
8200 NEXT J
8210 NEXT K
8220 PRINT O$,B$;" ";Y$
8230 PRINT USING 160:"K";INT(M(13,8))
8240 NEXT L
8250 PRINT "JJTOTAL WORK ORDER $ FOR :";Q$;" $";S(13,8)
8260 GOTO 8270
8270 M=S
8280 END
8290 PAGE
8300 PRINT "      ***** SUM CC: JO *****"
8310 PRINT "      ***** SUM S0# JO *****"
8320 DIM S(13,8)
8330 DIM M(13,8)
8340 PRINT "ENTER 1-COST CENTER SUM ROUTINE  2-S0# SUM ROUTINE ";
8350 INPUT Z4
8360 IF Z4=2 THEN 8400
8370 PRINT "JJJENTER COST CENTER (EX-PJ3) ";
8380 INPUT Q$
8390 GOTO 8420
8400 PRINT "ENTER S0#(6 DIGITS) (EX 7947-10) ";
8410 INPUT Q$
8420 S=0
8430 FIND 3
8440 READ E33:X0
8450 PAGE
8460 IF Z4=2 THEN 8490

```

```

7450 DIM M(13,8)
7460 PRINT "JJJENTER SO# (4DIGITS)";
7470 INPUT Q$
7480 S=0
7490 FIND 3
7500 READ @33:X0
7510 PAGE
7520 PRINT "SO# ";Q$,"WORK ORDER SUM"
7530 PRINT "JJJ";"SO#","CC","
7540 FOR L=4 TO 3+X0
7550 FIND L
7560 READ @33:O$,B$,Y$,D5
7570 Z$=SEG(O$,1,4)
7580 IF Q$<>Z$ OR D5<>1 THEN 7670
7590 READ @33:N$,M
7600 FOR K=1 TO 8
7610 FOR J=1 TO 13
7620 S(J,K)=S(J,K)+INT(M(J,K))
7630 NEXT J
7640 NEXT K
7650 PRINT O$,B$;" ";Y$
7660 PRINT USING 160:"K";INT(M(13,8))
7670 NEXT L
7680 PRINT "JJTOTAL WORK ORDER $: ";S(13,8)
7690 M=S
7700 END
7710 PAGE
7720 PRINT " ***** SUM ALL JO *****"
7730 DIM S(13,8)
7740 DIM M(13,8)
7750 PRINT "JJJENTER SO# (4DIGITS)";
7760 INPUT Q$
7770 S=0
7780 FIND 3
7790 READ @33:X0
7800 PAGE
7810 PRINT "SO# ";Q$,"JOB ORDER SUM"
7820 PRINT "JJJ";"SO#","CC","
7830 FOR L=4 TO 3+X0
7840 FIND L
7850 READ @33:O$,B$,Y$,D5
7860 Z$=SEG(O$,1,4)
7870 IF Q$<>Z$ OR D5<>2 THEN 7960
7880 READ @33:N$,M
7890 FOR K=1 TO 8
7900 FOR J=1 TO 13
7910 S(J,K)=S(J,K)+INT(M(J,K))
7920 NEXT J
7930 NEXT K
7940 PRINT O$,B$;" ";Y$
7950 PRINT USING 160:"K";INT(M(13,8))

```

```
6940 MOVE @N:10,50.2
6950 PRINT @N:V$
6960 MOVE @N:10,48.2
6970 PRINT @N:X$
6980 FOR J=1 TO 17.25 STEP 3.25
6990 READ A$
7000 MOVE @N:4,J
7010 PRINT @N:A$
7020 NEXT J
7030 READ A$
7040 MOVE @N:10,20
7050 PRINT @N:A$
7060 FOR J=22.25 TO 42 STEP 3.25
7070 READ A$
7080 MOVE @N:4,J
7090 PRINT @N:A$
7100 NEXT J
7110 READ A$
7120 MOVE @N:10,46
7130 PRINT @N:A$
7140 FOR J=20 TO 90 STEP 10
7150 READ A$
7160 MOVE @N:J,42
7170 PRINT @N:A$
7180 NEXT J
7190 MOVE @N:33,43.75
7200 PRINT @N:"CURRENT FY";J$
7210 MOVE @N:71,43.7
7220 PRINT @N:"BFY";K$
7230 FOR K=1 TO 8
7240 FOR J=1 TO 13
7250 IF M(J,K)=0 THEN 7320
7260 IF J=7 THEN 7320
7270 IF J=>8 THEN 7300
7280 MOVE @N:10+10*K,42-J#3.25
7290 GOTO 7310
7300 MOVE @N:10+10*K,43.25-J#3.25
7310 PRINT @N: USING 180:M(J,K)
7320 NEXT J
7330 NEXT K
7340 PRINT @N,17:1.792*.8,2.816*.8
7350 MOVE @N:35,75.75
7360 PRINT @N:"WORK EXECUTION DOCUMENT"
7370 PRINT @N,17:1.792*.45,2.816*.45
7380 MOVE @N:70,75.75
7390 PRINT @N:"(ARRADCOMR 37-17)"
7400 PRINT @N,17:1.792*.6,2.816*.6
7410 END
7420 PAGE
7430 PRINT " ***** SUM ALL WO *****"
7440 DIM S(13,8)
```

WORK EXECUTION DOCUMENT

(ARRADCOMR 37-64)

TO CC: RESP PERSON: BUILDING:		DATE: TEL:	FROM CC: INITIATOR: BUILDING:	APPROVED: DATE: REV NO:
WORK ORDER <input type="checkbox"/> ORDER NO _____ TITLE _____		PLAN START DATE SO EXP DATE INT MGT CODE	PLAN END DATE SOH CC	
A		<input type="checkbox"/> SBR <input type="checkbox"/> FP <input type="checkbox"/> EXEMPT <input type="checkbox"/> INCREASE <input type="checkbox"/> DECREASE <input type="checkbox"/> CURRENT		
B		DESCRIPTION OF WORK TO BE PERFORMED:		
C		PLANNED INTERNAL EXPENDITURES		
		PRIOR YR EXECUTION	FISCAL YEAR 1ST QTR 2ND QTR 3RD QTR 4TH QTR	FY 1ST QTR 4TH QTR 1ST QTR C/F
CIV D/L HOURS				
MIL D/L HOURS				
C TOTAL LABOR \$				
TRAVEL				
MISC				
SUB TOTAL				
D		PLANNED EXTERNAL OBLIGATIONS		
TOTAL MAT'L				
TOTAL CONTR				
TOTAL OGA				
TOTAL EQUIP				
SUB TOTAL				
GRAND TOTAL				

INSTRUCTIONS FOR COMPLETING WORK EXECUTION DOCUMENT

BLOCK A

To: Enter code (3 char.) of performing CC. The person responsible for the work will legibly sign, date, and return Document to initiator.

From: Enter code (3 char.) of authorizing CC, the initiators name, and date.

Approved: Chief of authorizing CC signs, and dates upon return of Document from performing CC.

Building: Enter geographic location code (1 char): A = Aberdeen, E = Edgewood, W = Watervliet, (Blank) = Dover. Enter building number (4 Char)

Tel: Enter telephone Extension (4 Char)

Work Order: Check if a work order; if not leave blank.

Job Order: Check if a job order; if not leave blank.

Plan Start Date: Enter date work is planned to start (6 char, YYMMDD).

Plan End Date: Enter date work is to be completed (6 char, YYMMDD).

Rev No: Enter 01 on the original Document. Number revisions consecutively.

Order No:

Work Order: Enter 4 digit SO number and assign a 2 digit WO number.

Job Order: Same as WO except add three numbers to identify job order.

SO Expiration Date: Enter expiration date of funds, (YYMMDD).

SO Holder CC: Enter code (3 char) of the CC responsible for the SO.

Title: Include end item nomenclature and descriptive work title, i.e.

120mm Cannon XM256, (Max 22 spaces).

Internal Mgt Code: Leave blank. Code system has not been developed yet.

Type Order: Check appropriate block, e.g. Stabilized Billing Rate, Fixed Price or Exempt Order.

Funds: (To nearest dollar):

Prior: Leave blank if this is an original assignment. If amount of funds is being changed, enter previous current amount.

Increase: If this is an original assignment enter amount of funds being allocated. If funds are being increased enter amount of increase.

Decrease: If funds are being decreased, enter amount of decrease.

Current: Adjust "Prior" amount accordingly and enter here.

BLOCK B

Specify work to be conducted.

BLOCK C: To be completed by performing CC and cannot be changed. Prior Year Execution will be computer-generated.

Enter planned D/L hours and in-house expenditures by quarter for the current fiscal year and the 1st QTR of the next FY. In the carry forward (C/F) column, enter expenditures planned for beyond the 1st QTR of the next FY.

Total Labor Dollars: Sum of civilian and military labor.

Travel: Enter planned travel.

Misc.: Transportation, supplies, etc.

Sub Total: Sum of total labor, travel, and misc.

BLOCK D: To be completed by performing CC.

Enter planned obligations by quarter and/or C/F as explained in Block C.

Material: Raw material and off-the-shelf items—costing less than \$500.

Contracts: Services, purchases, major procurements

OGA: Govt agencies other than ARRADCOM.

Equipment: Electronic/mechanical devices etc.

Sub Total: Sum of material, contracts, OGA, and equipment.

BLOCK E: To be completed by performing CC.

GRAND TOTAL: sum of Blocks C and D.

APPENDIX D
FORM 232, SALES ORDER MASTER PLANS

SALES ORDER MASTER PLAN

IDN/SO NO.	REV NO.	REV DATE	AMCCMS NO.	PAGE	OF
PROJ NO.	PROJECT PLAN FOR				

A	CUSTOMER				S.O.	CCN	TYPE			
PRIOR YEAR CARRY-IN			NEW FUNDS FOR TARGET FY				TOTAL FUNDS AVAILABLE			
B	N-UNOBL	A-U/C (-)	TOTAL	1 QTR	2 QTR	3 QTR	4 QTR	TOTAL	*	
			PLANNED / ACTUAL OBLIGATIONS							
C			1 QTR	2 QTR	3 QTR	4 QTR	TOTAL	C/F	TOTAL	
INTERNAL EFFORT										
D	RESOURCE	ACC	PCC	1 QTR	2 QTR	3 QTR	4 QTR	TOTAL	C/F	TOTAL
A	1 CIV D/L HRS									
	2 MIL D/L HRS									
	3 FUNDS I/H									
B	1									
	2									
	3									
C	1									
	2									
	3									
D	1									
	2									
	3									
E	1									
	2									
	3									
F	1									
	2									
	3									
G	1									
	2									
	3									
H	1									
	2									
	3									
I	1									
	2									
	3									
J	1									
	2									
	3									
K	T 1 CIV D/L HRS									
	T 2 MIL D/L HRS									
	T 3 FUNDS I/H									
E	EXTERNAL EFFORT									
	EXT PERF O/H	TP	ACC	1 QTR	2 QTR	3 QTR	4 QTR	TOTAL	C/F	TOTAL
1										
2										
3										
4										
5										
6										
7										
8										
9										
	TOTAL EXT									
F	TOTAL PROJECT FUND REQUIREMENTS			1 QTR	2 QTR	3 QTR	4 QTR	TOTAL	C/F	TOTAL

G ALL WORK HAS BEEN COMPLETED. PROGRAM AUTHORITY NOT INTENDED FOR USE.

H COMMENTS:

SO HOLDER/REVIEWER	TYPE/PRINTED	SIGNED	DATE
I PROJECT OFFICER:			
PROGRAM ANALYST:			

INSTRUCTIONS FOR COMPLETING SALES ORDER MASTER PLAN

BLOCK A Identification

1. Item/SD NO. - Enter the four digit alpha/numeric sales order number as follows:
 - a. Prior to authorization of the program, enter alpha Lab/Div identifier (ARRADCOM 11-1 Chg. 6) in first digit followed by three numeric number.
 - b. After receipt of program, enter sales order number.
2. Revision Number and Date - Enter two digit number, the original submission shall always be number 01.
3. AMCNS Number - Not to exceed thirteen characters.
4. Project Number - Not to exceed twenty-two characters.
5. Project Plan For - Short title.
6. Customer - Enter the agency issuing the program, i.e., DARCOM, ARRCOM, Air Force, etc.
7. S. O. CCN - Enter cost center number of the sales order holder.
8. Type - Enter applicable code for each appropriation as listed in ARRADCOM 11-1, Chg. 6.

BLOCK B Funds

1. Prior Year Carry-in - This section represents the fund status of the project as of the end of the prior fiscal year. The definition for prior year carry-in is the same as published by the Comptroller for resources carryover in DF. 5 Jul 79, subject: Clarification of the Term "Carryover." Prior year carry-in = Unobligated AIF balances plus the value of the AIF orders uncosted minus uncosted balances of obligations on AIF contracts, purchase orders, and OGA's.
2. New Funds for Target FY - Enter funds received or anticipated for the fiscal year of the plan. Include any increase to prior year program expected.
3. Total Funds Available - Total of carry-in and new funds. If carry-in funds are not required and all work is complete, then fill out Block G of the form.

BLOCK C

1. Planned/Actual Obligation - Enter planned/actual obligation for each quarter and total for the fiscal year of the plan.
2. Carry Forward (C/F) - Enter planned amount to be obligated in subsequent fiscal years.
3. Total - Represent total planned/actual obligation plus C/F.

BLOCK D

1. Internal Effort - This section represents the total in-house effort in terms of direct labor hours and funds to be expended by ARRADCOM performers in support of the project. The only project exclusions are external fund usage for materials, contracts, and OGA.
2. Resource Column - For each ARRADCOM performer, three types of resources are identified and estimated: Civilian D/L hours, Military D/L hours, and the fund requirements for direct labor, overhead, and other misc costs.
3. ACC - Authorizing cost center will normally be the work order holder.
4. PCC - Performing cost center will normally be the job order holder. The same (PCC) will appear on more than one series of lines if it receives job orders from more than one (ACC).
5. Quarters 1, 2, 3, 4 and Total - Will reflect total labor hours and the planned amounts for the applicable fiscal year.
6. C/F - Enter the estimate of the remaining program which is not planned for accomplishment during applicable fiscal year. Show "0" if no amount remains for future years.
7. Total - If an amount is entered in C/F column, then total is the sum of the target FY and the C/F column. Otherwise, leave blank.
8. D1 - Civilian D/L Hours/D2 - Military D/L Hours - Enter the estimate of civilian/military direct labor hours to be executed by the reported cost center during the applicable quarter, total, C/F period, and grand total. Include the estimate for direct labor, overhead, travel and transportation and other direct costs. The only exclusions will be funds for use for materials, contracts, equipment and OGA.
9. Total D1 - Civilian D/L Hours - D2 - Military D/L Hours - D3 - Funds In-House - Sum the total civilian/military direct labor hours and the total funds to be used by all ARRADCOM performers and enter the totals in the applicable columns.

BLOCK E

1. External Effort - The overall objective of this section is to provide information on estimated obligations/awards. Accordingly, the total value of material, contract, equipment or fund transfer to an OGA should be shown in the quarter that is planned to be awarded/transferred. No prior year obligated AIF or NAIF contracts will be shown in this section. If amendments to existing contracts or an incremental amount is planned for obligation toward a FY contract, the amendment/incremental amount should be handled like a new CY contract.
2. External Performer Out-of-House - Identify the Contractor or Other Government Activity. Where the performer is unknown and for miscellaneous material, use the terms "material," "contract," or "OGA" as applicable for identity purposes.
3. Type - Use "A" to indicate an AIF action and "N" to indicate a NAIF action.
4. ACC - The authorizing cost center (ACC) will be identified. This will normally be the work order holder.
5. Quarters 1, 2, 3, 4, and Total - Will reflect the total funds to be obligated/awarded during the applicable quarter, total, C/F, and grand total.

BLOCK F

Total Project Fund Requirements - Represents total planned expenditures/obligations and carry-forward to later fiscal years summarizing data entered in Blocks D and E.

BLOCK G

All Work Has Been Completed, Program Authority Not Intended For Use - An X will be placed in the box when the Prior Year Carry-in funds are not going to be used.

BLOCK H

Type order should be identified in comments block, i.e., fixed price or Stabilized Billing Rate.

END

FILMED

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